The Orchadian

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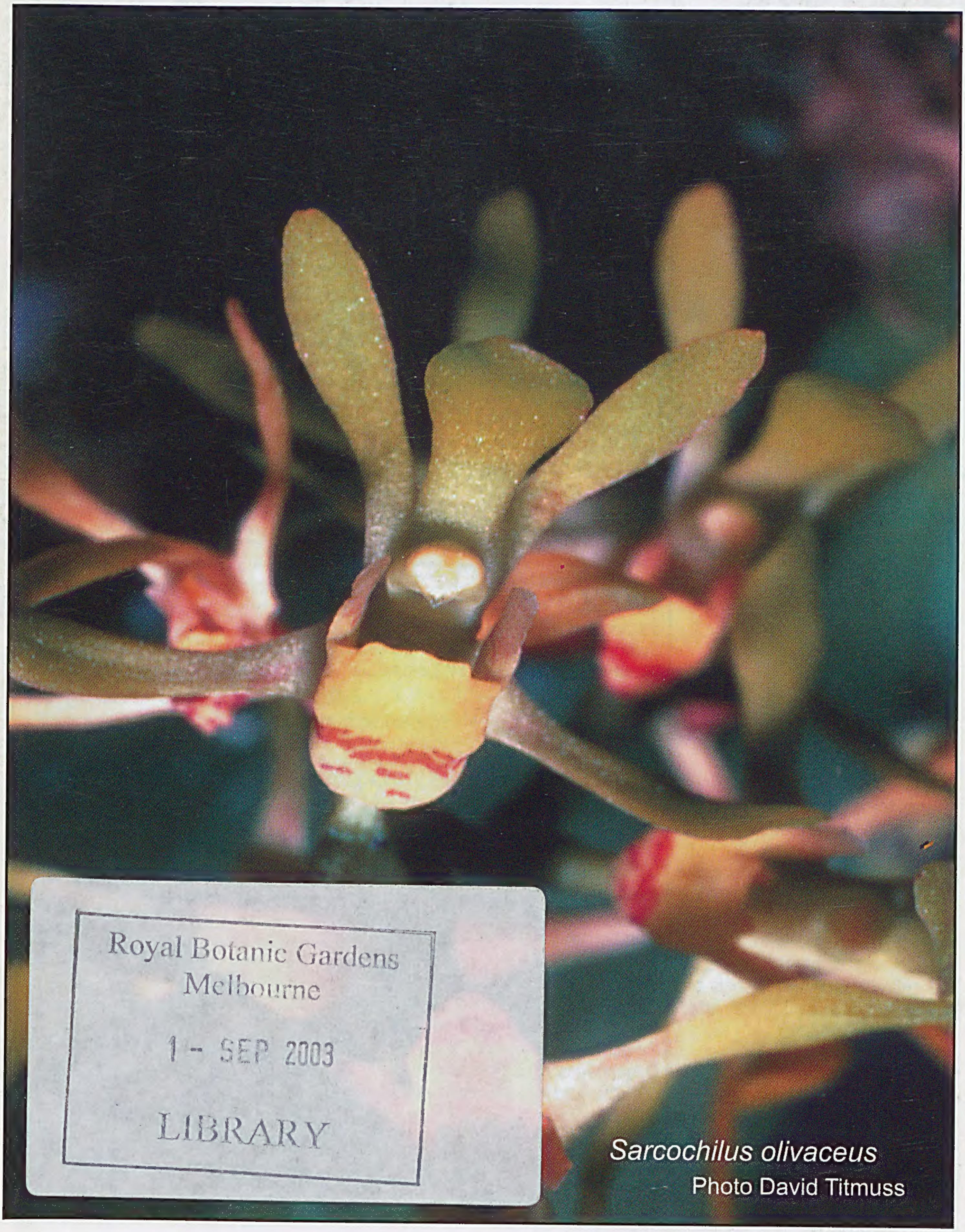
Official Journal of the Australasian Native Orchid Society



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Sarcochilus olivaceus
Photo David Titmuss

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The Orchadian

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Volume 14 Number 5

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5th AUSTRALASIAN NATIVE ORCHID CONFERENCE

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Speakers

Speaker	**Subject**
James Indsto	Diuris pollination
John Woolf	
David P Banks	Contemporary Australasian Orchid Literature
Geoff Stocker	Papua New Guinea Orchids
Kevin Western	Conservation Etc
Peter McCaulay	Native Orchid Conservation through the use of aseptica symbiotic techniques
Ray Clement	Introduction to Australian Native Orchids
Gary Yong Gee	Taxonomy
Ron Parsons	American View on Australian Native Orchids
Phil Spence	Australasian Hybrids with a future
Michael Harrison	Twig Epiphytes

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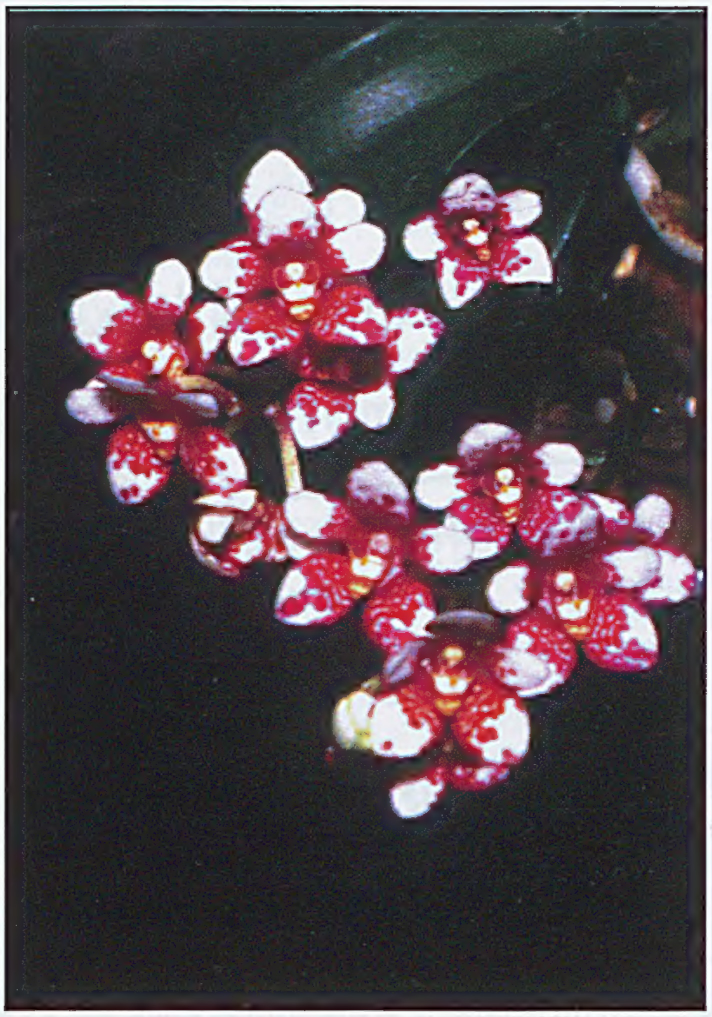
NB. Apologies. There is no Editorial this issue due to lack of space, I hope to have one again next time.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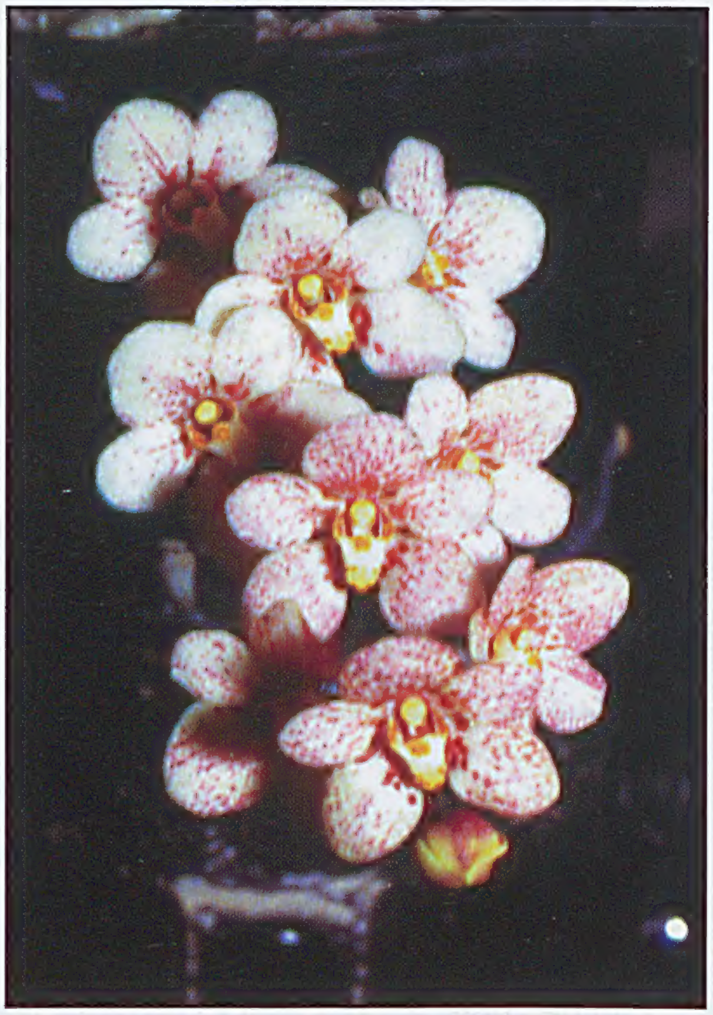
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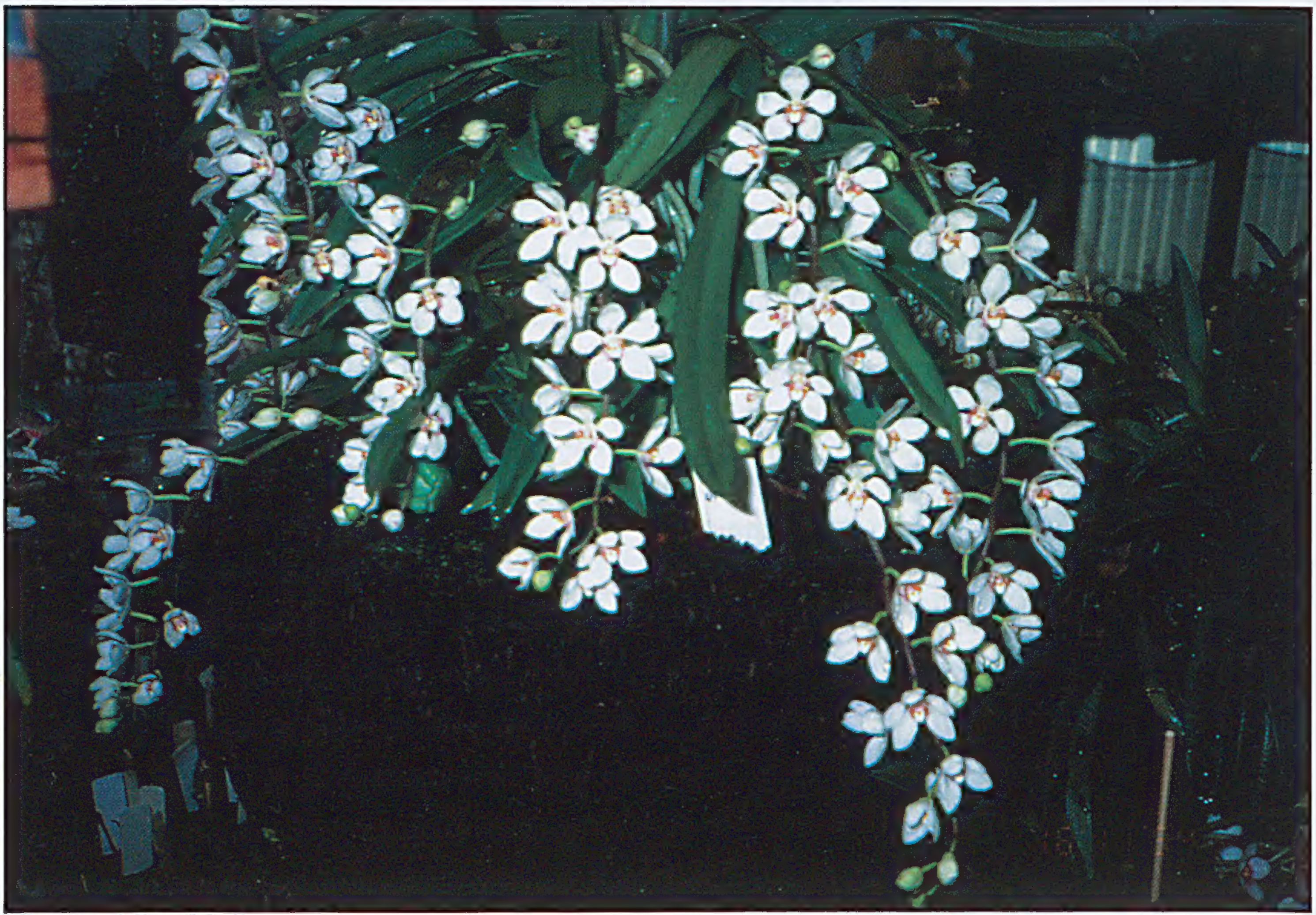
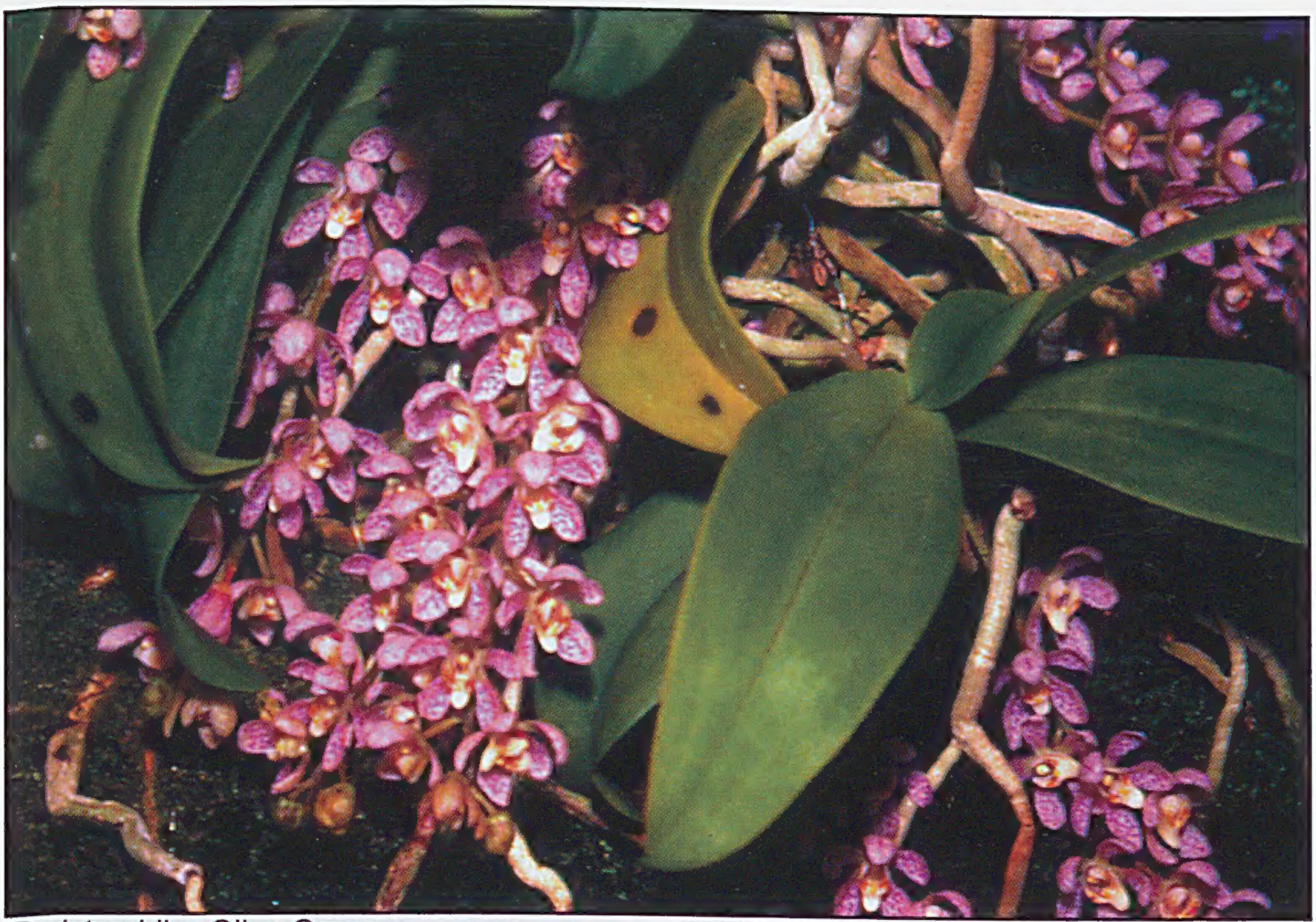
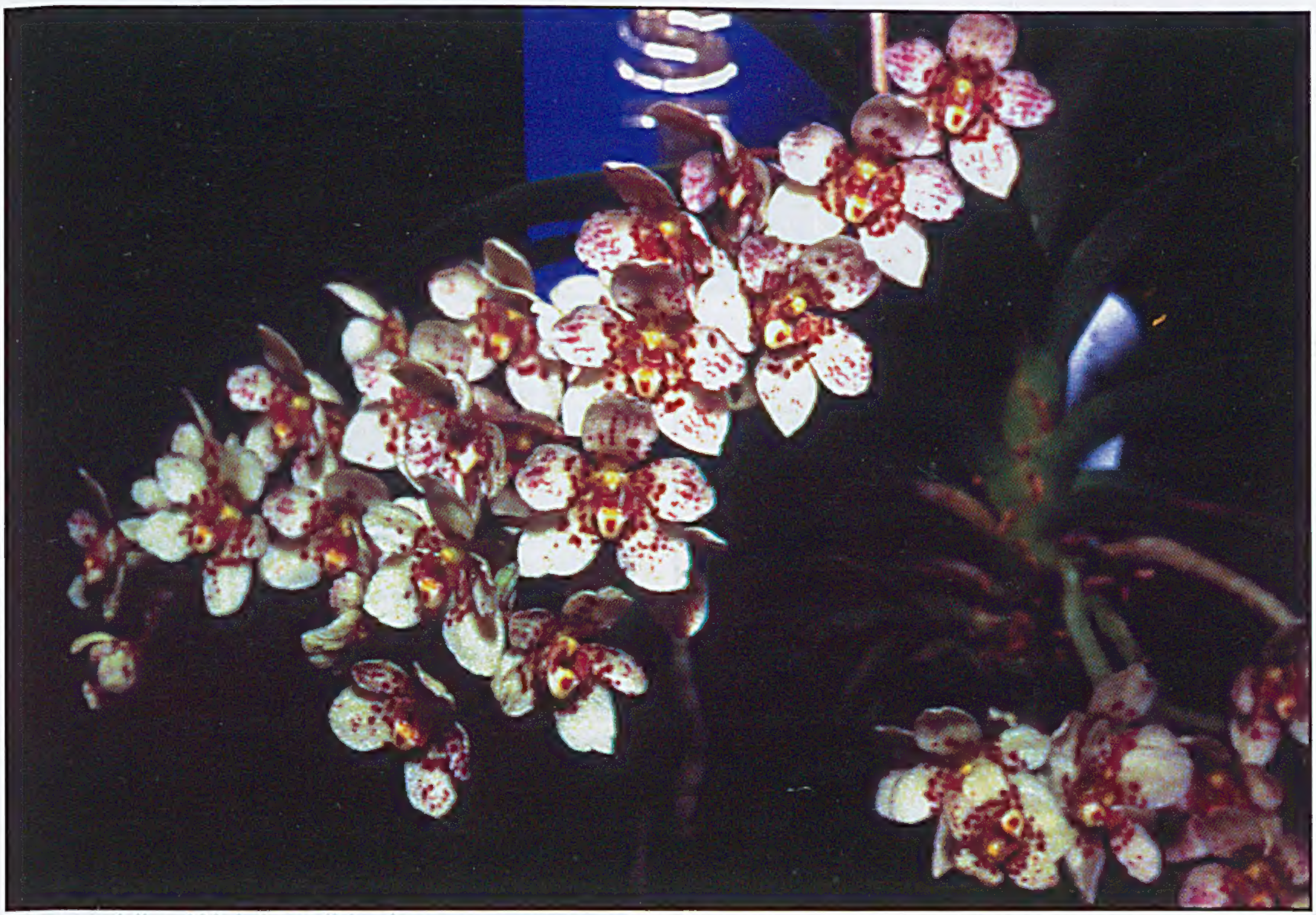

Sarcochilus Melba



Peristerchilus Olive Grace



Sarcochilus Weinhart 'Lisa'

Photos Frances Wilde

Some Show Dates for 2003:

ANOS Newcastle Group – Spring Show - 30th and 31st August. Main Auditorium
Club Macquarie, 458 Lake Road, Argenton
ANOS Central Coast Spring Show - 11th to 14th September, in conjunction with Mount Penang Flora Festival, Pacific Highway Mt. Penang, Kariong.
ANOS Warringah Group Spring Show - 13th and 14th September, Forestville Community Hall, Starkey St Forestville.
16th Australian Orchid Council Conference - Adelaide 18th to 21st September, 2003.
ANOS Port Hacking Spring Show - 7th September, 2003 – Scout Hall, Old Bush Rd., Yarrawarra.
ANOS Illawarra Spring Show – 13th to 14th September, Westfield Figtree.
ANOS Macarthur Spring Show – 20th to 21st September, Jim Garden Centre, Mt Annan.
ANOS Sydney Spring Show – 20th to 21st September, Eastwood Shopping Centre, Rowe St Eastwood.
ANOS Central Coast – Sarcochilus Show - 11th and 12th October – Bushland Nursery, The Entrance Rd, Erina Heights.
ANOS Sydney Sarcanthinae Show – 18th October – Eastwood Shopping Centre, Rowe St Eastwood.
ANOS Newcastle Group – Late Spring Show -18/19th October. Main Auditorium
Belmont 16ft Sailing Club, The Parade, Belmont
ANOS Port Hacking Sarcanthinae Show - 19th October, 2003 - Scout Hall, Old Bush Rd., Yarrawarra.
ANOS Illawarra Sarcanthinae Show - 11th to 12th November, Old Court House, Harbour St, Wollongong.
ANOS Geelong Group – Annual Show – 1st and 2nd November, Masonic Centre, Regent St Belmont.
ANOS Victorian Group Inc. - Spring Show - 27th and 28th September, 2003, Mt Waverley Community Centre, 47 Miller Crescent, Mt Waverley.
Darling Downs Orchid Ass. Inc – Spring Show – 20th to 27th September, at Centenary Heights High School Hall.
Devonport Orchid Society's Sarcochilus Show - 9th of November, 2003 from 9.30am till 3.30pm
Venue Devonport Showground, Gunn St. Entrance.Contact Secretary Roslyn Mapley, ph.0364253216

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What the Groups are Doing!
ANOS Geelong Group Inc.

Frances Wilde
P.O. Box
Little River, 3211

Our group started in 1987 with twenty members. We are still a relatively small group, total membership about eighty, with only about twenty coming along to our monthly meetings, which are held on the 2nd Wednesday of each month. We manage to have a different guest speaker to each of our meetings, and have had quite a wide range of topics, from endangered orchids, to awarded orchids and everything in-between. Some of our members like to travel to other states with their camera and bring back photos of orchids they have managed to find on their trip, and they will have a slide night to show off what they have found.

At our monthly meetings we have members bring in their flowering orchids and give a short talk about each of their plants; where they got it, how they grow it, etc. Our membership is quite diverse, with a handful of members who grow both epiphytes and terrestrials, and a very strong group whose interest is in bush walking and searching for that elusive orchid.

The last year has not been very fruitful for this group as the drought in Victoria has had a marked effect on the terrestrials, barely showing their leaves, let alone their flowers, but still the very experienced members can manage to find the odd one or two. This group also works with Department of Sustainability and Environment, (D.S.&E) finding and cataloguing orchid sites around Anglesea, Brisbane Ranges, the You Yangs National Park and other local areas, a new area to be investigated soon is the just opened Earth Sanctuary at Little River.

The epiphyte growers are but few in numbers, but each year they manage to put on a very good display at our Annual Orchid Show, on the first weekend in November. This year a new venue is being tried for this event and it will be at the Masonic Centre, Regent Street, Belmont, a suburb of Geelong. The main aim of this show is to display our native orchids, which is mainly sarcochilus at this time of the year, a few dendrobiums are still out and we supplement the display with exotics. We also have a good sales bench for anyone wanting to purchase any orchids. The money raised from this event provides us with enough money to pay for the hall rent, etc for the year.

We also have field trips where everyone that has a spare day get together for a barbeque lunch in a quiet nook and then search for orchids with Everett Foster and Margaret McDonald leading the way, it is soon down on your knees and tail up, peering down at some small flower about an inch from the ground, it is all very exciting.

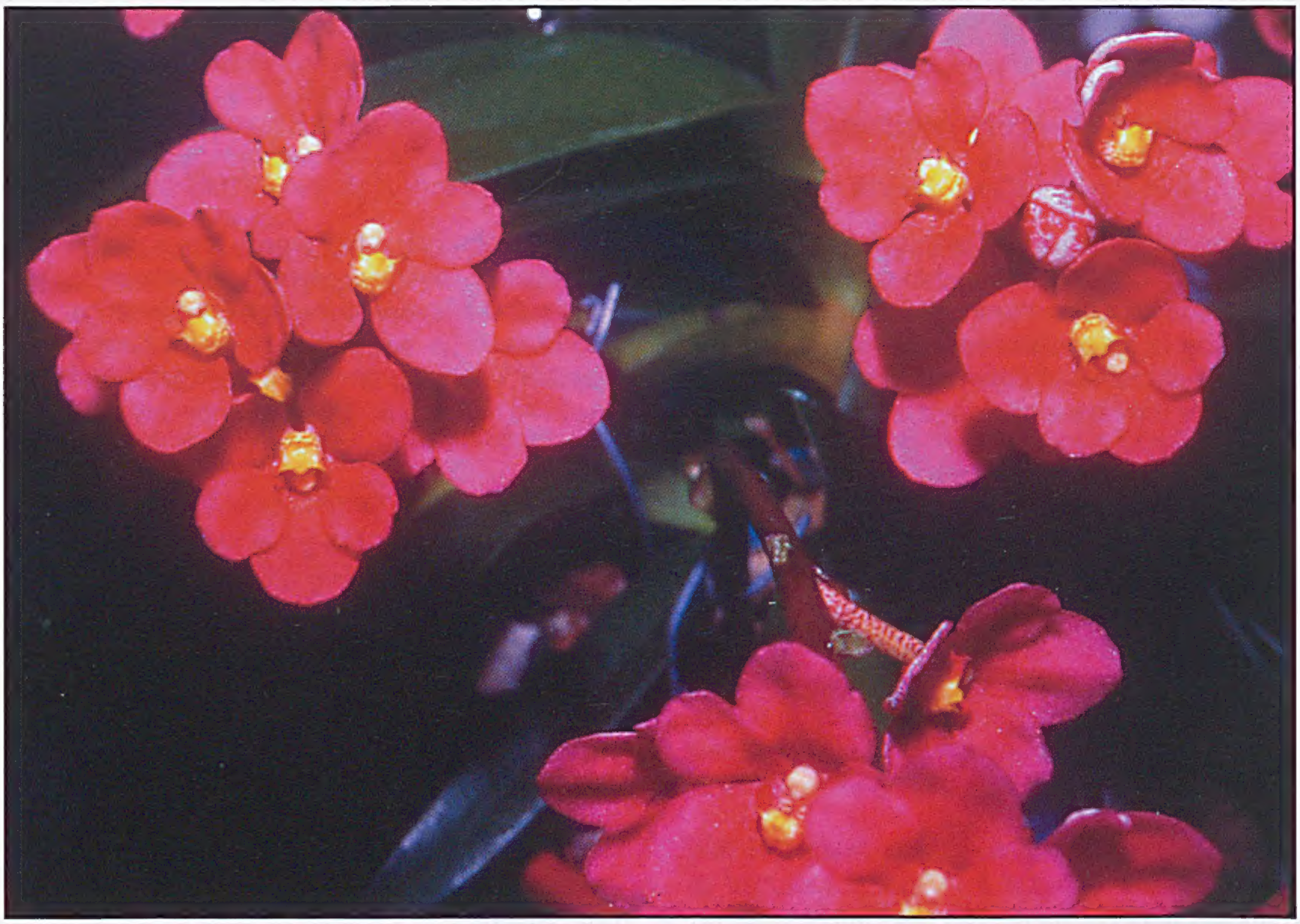
In October of this year we are looking forward to putting on a display at the Botanic Gardens in Geelong, these gardens have just been through an upgrade during the past couple of years, an orchid house for terrestrials is one of their new acquisitions, with some of the staff there joining our Society.

For the last two years we have held a terrestrial workshop at a member's property at Little River. This has been run by a member of A.N.O.S. Vic group - Dick Thompson and his wife Marion, and with their help, we have learnt all about potting up the tubers that have been donated to our group by a well known terrestrial grower, Helen Richards.

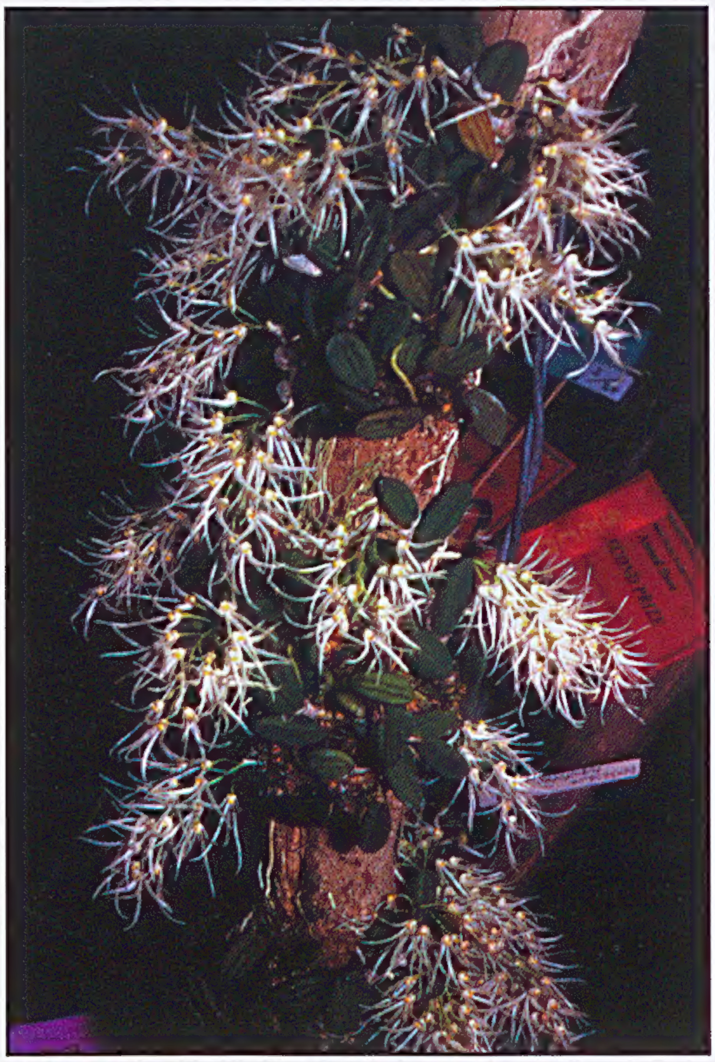
This is the third year we have had a growing competition, where we have purchased seedlings of sarcochilus and dendrobiums, members having to return them to each of our monthly meetings. This year we purchased *Dockrillia striolata* and a *Sarcochilus* First Light. This competition has provided us with lots of interest and the owner of the first plant to flower each year gets a coffee mug hand painted by Doris Cummin's.

For our December meeting, we have a night out at a local eatery where all members present receive a Christmas gift, awards are handed out and door prizes of Christmas goodies are won. It is a great way to finish off our year.

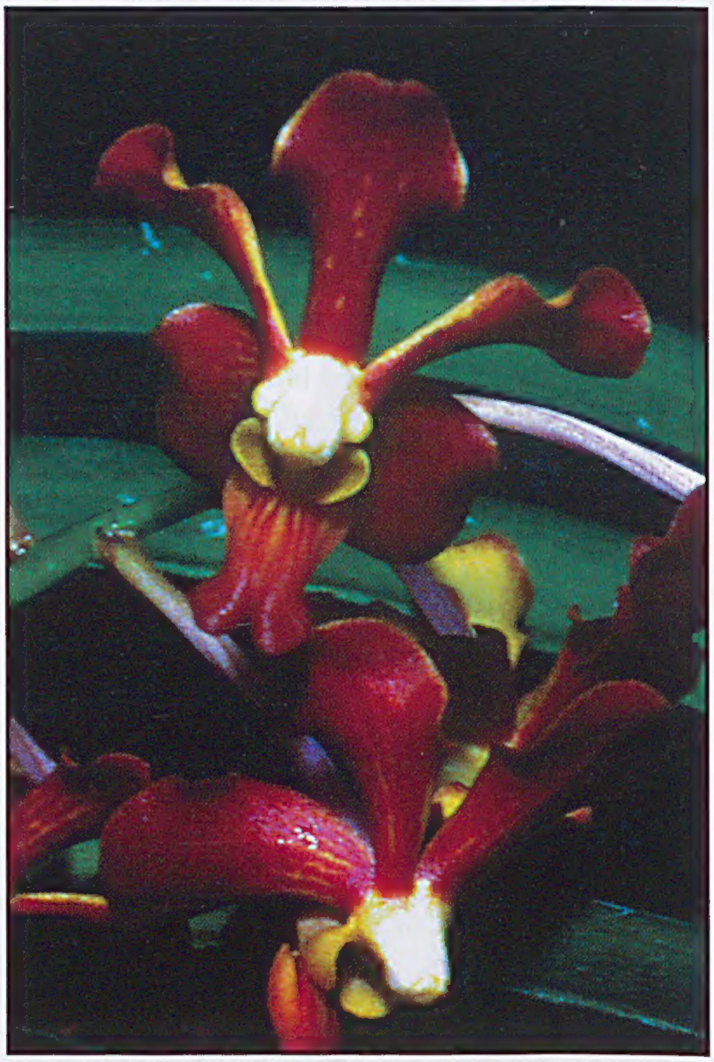
-oOo-



Sarcochilus Yvette 'Jakes Pride'



Dockrillia linguiforme



Vanda hindsii 'Tumbi'

Photos Frances Wilde

Annual Sarcanthinae Shows in Victoria

It is usually November in Victoria when these orchids are at their best and the first show each year is put on by the Geelong ANOS Group, being held on the first weekend in November. This club although relatively small in number, manage to put on a great little display of orchids for the viewing public. Last year one of our biggest growers was away so the committee decided to supplement the display with Bromeliads and Cacti. This proved a great success, and the visiting public was not disappointed with what they saw.

This coming year's show has been moved to The Masonic Centre, Regent Street, Belmont - Melways Map 227 J8/9. The show dates are 1st & 2nd November, 2003, from 10am - 4pm daily. The Champion of the show last year was a *Sarcochilus* Victor - a cross between *S.* Nicky and *S. hartmannii*, and although the plant was quite small, the Judges thought it unusual. There was quite a good collection of *Rhinerrhiza divitiflora* crosses which were displayed to their advantage on a totem pole at the entrance of the display, and further along an unusual pink *Sarcochilus* First Light was very pretty, and the Judges rewarded the grower with a ribbon. A very big Melba in 'full flight' was very pretty - this had been growing in a tree-fern pot for fifteen years and the owner said it was due for a repot soon!!!!!

It is a bit late for most of the dendrobiums, but the ones displayed were beautiful - and the *Dendrobium aemulum* and *Dockrillia linguiforme* plants made everyone envious of their owners. To anyone visiting Geelong it is well worth a visit to this show, they will not be disappointed with what they see, the sales table is well patronised, and the prices right.

On the second weekend in November (this years show dates are 8th & 9th, hours 9am - 5pm daily) a show is put on by Maribyrnong Orchid Society, a club on the western side of Melbourne, in the Maribyrnong Community Centre. This is a big club and sarcochilus growers are aplenty, so the display they put on is second to none......just ask anyone who has been to it. It is an open show to allow all sarcochilus growers to exhibit these lovely little plants. Last year the Champion Sarcochilus went to visiting club members from the Mornington Orchid Club, Ann Murphy and Keith Moss whose plant of *Sarcochilus* Weinhart was something to behold. The plant was not big, but it made up for it in shape and colour.........the Judges thought it was good too. We have had interstate visitors each year, last year Ray Clement, Tinonee Orchid Nursery, was our guest for the weekend, and Brian & Phena Gerhard, Down Under Native Orchids, came down to visit family who lived nearby and brought display plants with them, one of which *Vanda hindsii* 'Tumbi' received a best in its section. Kevin Wilson from Sydney has also been a constant visitor to this show, he must be notching up a few kilometres by now coming down the Hume Hwy and always manages to bring a few plants. Last year we also managed to hold the interest of two sarcochilus growers from South Australia, these members came over to see what was going on and spent the whole weekend with us, later becoming members of the Maribyrnong Club and have promised they will be back this year again.

The third weekend is the last of the shows and this is put on by the Mornington Orchid Club. This is also an open show for one day only, it is a lot of work to put on a display as they do, but they do it well. Last years winner was George Ingram and his plant of *Sarcochilus* Yvette, which is still leaving me breathless. Another plant I just have to mention was Ted Elgood's *Peristerchilus* Olive Grace - this was growing on a slab of tree fern and also won a major prize. Their show date this year is the 16th November.

Arrange your holidays to take in one or all of these shows, you won't be disappointed.

wilde@pipeline.com.au

R.I.P. *Rhizanthella slateri*

Alan W Stephenson
astephenson@vtown.com.au

When I contemplated writing this missive I thought it might turn out to be cathartic, but after typing just these few words I quickly came to the realisation the Underground Orchid would almost certainly become just that, underground. Not until it was tripped over next time by some itinerant bushwalker, uncovered by a nosy bird or inquisitive animal, would this orchid be buried forever by a bulldozer and four lanes of bitumen.

For you see dear friends and orchid lovers, probably by the time this outpouring gets published, a rarely seen and unique orchid in Australia and possibly the world, will no longer exist *in situ* at Bulahdelah.

Much has been written about this species since it was originally discovered by Ernest Slater in 1931 and all that remains now is to officiate at what will be a brutal end to such a mysterious and fascinating native wonder from the base of Alum Mountain.

It should be known to all subscribers to orchid magazines in Australia and those who read it over a shoulder, that the Roads and Traffic Authority (RTA) of NSW, is to soon construct a by-pass of the small township of Bulahdelah about 250 km north of Sydney. As mentioned in recent articles the RTA has selected, "Option E", as the preferred model, despite numerous other routes with a less difficult topography. Notwithstanding the opinions of 88% of the local population, the RTA has decided to pursue their original choice for reasons of financial expediency. This means "Option E' is the cheap model even though extensive earthworks are necessary.

All normal processes regarding the route and the eventual selection have been made, and there seems little to complain about in that regard. During an open day to publicly show "Option E" in its best light, bus tours were undertaken. However, to eliminate healthy discussion those known to be in favour of "Option E" were placed on one bus and the known detractors on another and of course were destined not to confront each other. A well organised management process. The usual surveys were conducted, sometimes in a brutal fashion as at least one colony of a yet to be named *Corybas (Anzybas)* were literally blown up in seismic testing.

An Environmental Impact Statement has been prepared and is due for release in late May or June, 2003. It will make no difference as to my mind, a true management decision has already been made. That is, consultation has been wide and thorough but regardless of the result of the consultative process, I believe the choice of "Option E" has been made, as the land necessary for this option has already been resumed. This smacks of the Henry Ford saying, "Any colour you like as long as it is black".

I have been fortunate to see four sites containing this species. In 1997 I identified it near Huskisson, on the south coast of NSW (The Orchadian Vol. 12 No 4) after it was unearthed on a local property. In September 2001 in company with an associate, our size eight boots unearthed another plant just a few kilometres from the first discovery, during the course of an Environmental Study of vacant land. These are the only known specimens to be located at sea level.

Then all hell broke loose when it was found at Bulahdelah in June, 2002 directly in the path of the proposed by-pass. It is now common knowledge I was contacted by Malcolm Carrall of Bulahdelah after he read something I wrote about *R. slateri.* Following his inquiry I sent him some slides and photos and in June, 2002, his son discovered two capitula, which had been dislodged by a foraging bird or animal. Naturally a party of interested persons travelled to see it in early formation and I again travelled there in October to see it in flower. By that time Malcolm's daughter had located another site some 300 m away. Not only are these sites in the path of "Option E" but also the sites of the original discovery and subsequent finds in 1932 and 1933.

Then the fun started as I urged Malcolm to lodge an application to list *R. slateri* as a Threatened Species which was successful on 6th December, 2002. In my naivete I thought this listing might actually make some difference but despite a meeting with Roads and Transport Minister Carl Scully it appears to be a case of sorry Al but we really don't give a damn. About Christmas 2002 I assembled a twenty four page dossier of notes and a CD of *R. slateri* photos. These were sent to the Federal Minister for the Environment, Dr David Kemp, NSW Premier Bob Carr, Deputy Premier and then Planning Minister Andrew Refshauge, Environment Minister Bob Debus, The Australian Conservation Foundation, Greenpeace, NSW Conservation Council, The Total Environment Centre, NSW Greens MLC Ian Cohen the Sydney Morning Herald and a local state MP. I have received four replies thanking me for my interest with the State politicians forwarding the data to the National Parks and Wildlife Service.

I must point out the reply from Dr Kemp was I consider, most insulting. It came via Environment Australia and stated as the orchid was listed as a NSW Threatened Species, this did not entitle it to any consideration from a Federal body and again I interpreted this as "who really cares about the &#%$@ thing as it is not our problem". Needless to say I was a little put out by this, mostly because the total funding for the Bulahdelah By-Pass amounts to $141 million of which about $40-$50 million is Federal money. In most cases where a sum of that amount was forthcoming one would expect some stipulation, or at least some interest about how it was to be spent but it would seem our national government is willing to spend large amounts of taxpayers' money to aid in the destruction of such a notably different orchid. Unfortunately it has no horticultural application and no one is likely to make large amounts of money from it, so we will pass on it through lack of interest.

If any of this sounds like the biggest whinge ever heard from an unsuccessful conservationist you might be right but I am simply staggered by the lack of interest and action from those politicians and so-called conservation groups who use statements such as "sorry this is not on our program" or "not in our focus at the moment" and gems such as "I will read it and get back to you via E-mail". Well to all of you, I am still waiting.

A quote from Dr. Kingsley Dixon of Kings Park and Botanic Gardens was included in the dossier and is repeated here, "The known sites for the Eastern Underground Orchid represent internationally significant locations for one of the world's rarest and most intriguing orchids. Failure to conserve these sites will lead to irrevocable loss of known habitat and undoubtedly result in the species facing extinction. For a developed country such as Australia, the loss of these last remaining sites is a national tragedy". It would appear that following a period where the orchid was not seen for many years it will now disappear from the site of its original discovery and the major source of those plants found since 1931, when Rev. H.M.R. Rupp named it *Cryptanthemis slateri*, for its cryptic method of growth.

It will indeed remain cryptic, as four lanes of bitumen will provide a perfect resting place, certain not to be disturbed under the altar of progress.

-oOo-

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A Bit About .... *Sarcochilus olivaceus*

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Sarcochilus olivaceus, with the exception of *Sarcochilus falcatus*, has the widest distribution of all the *Sarcochilus* species of Australia. In one form or another, *S. olivaceus* can be found from the base of Cape York Peninsula in the north, right down to about the vicinity of Moruya in southern New South Wales. That's in one form or another and, depending on whether you happen to be a 'splitter' or a 'lumper', you can end up in one big quandary about "what's what", "who says so" and "what would he know about it, anyway" type debates if you are foolhardy enough to express an opinion on *S. olivaceus.*

Most growers believe that there are two distinct forms *of S. olivaceus*: the southern or 'type' form found in coastal NSW, and the variety '*borealis*' which is the north Queensland form. Variety '*borealis*' is pretty well accepted as extending from the Mt Windsor Tableland, southwest of Cooktown, then southwards to around central coastal Queensland. But, the further south you go, the more muddy *S. olivaceus* becomes until you come up for air in NSW.

Most growers are very familiar with the NSW form of *S. olivaceus* and it really needs no introduction. Variety '*borealis*' occurs only at the highest elevations of its range and usually in heavy rainforest and often near creeks. It differs in a number of ways, both vegetatively and florally. Firstly, it is a much smaller plant than the southern form, rarely, if ever, having more than three or four leaves of no more than 6 cm in length. The flowers are smaller, much frailer and have more red striping and they don't often have more than six flowers or so, on each raceme.

The southern form on the other hand can achieve much grander proportions. Occasional plants are real monsters with up to eight leaves of around 12 cm in length and up to 4 cm in width which are generally thin in texture, but occasionally become plumpish and leathery with age. This contrasts with variety '*borealis*' which is nearly always thin and papery. The racemes of the southern form can grow to around 15 cm and support up to twenty 2.5 cm wide flowers, but this is exceptional and around ten to twelve would be more normal.

Don Barnham had a plant in his bush house, in about 1985, which had the longest racemes of any specimen of *S. olivaceus* that I have ever seen, in the wild or in collections. I remember counting the swollen buds and arriving at the figure of nineteen. I regret to this day never having seen that whopper after it opened. The moral of the story is simply this: *S. olivaceus* occasionally grows to gargantuan proportions. It is rather similar to *S. australis* in this regard.

The blooms of *S. olivaceus* are generally a soft light green in colour. Occasional forms will have lime green flowers and some others tend towards a yellowy colour, sort of like the inside of an avocado. The chin of the labellum is quite square and proportionately oversized when compared to the rest of the flower. There is distinct red/brown barring across the chin. The colour effect is quite pleasing.

But there is another form of *S. olivaceus* to be seen in the Australian bush. It occurs from roughly the Queensland border, up to at least as far north as the Calliope Range, near Gladstone. Lindley named it *S. parviflorus* in 1838, but this wasn't generally accepted because the name fell into disuse. More recently Clements and Dockrill in their respective publications have reverted back to the species concept. Dockrill at least expresses some timidness in doing so.

This form differs in many ways and when I first saw a specimen in flower I didn't have much idea what I had found. It looks very different from the type form of *S. olivaceus*, in my opinion, in most regards. For starters, the labellum mid lobe is solid white, not opaquely green/yellow as in the type form. The side lobes are very noticeably forward projecting as well. The whole flower is thinner in the segments and slightly smaller, giving a crabbier appearance. Also, at least in this boy's bush house, it flowers later!

Within its range *S. parviflorus* is quite a variable species, particularly up in the Calliope Ranges, west of Gladstone. The biggest variation would seem to be in its overall colour, which can vary from yellow tones through to light brown, tan and several shades of light green. But never the limey green of some NSW plants of *S. olivaceus*.

I remember exploring an extensive colony of this '*parviflorus*' form in southern Queensland. It was growing amongst other Sarcanthinae species such as *S. hillii*, *S. dilatatus* and *Rhinerrhiza divitiflora*. There were a large number of *Sarcochilus weinthalii* specimens to be seen as well.

The most obvious difference I noticed was just where this form chose to grow; mostly on the outer twigs of this shrubby, dry rainforest. Its roots were highly aerialised in the manner of *Plectorrhiza tridentata*, only there was, surprisingly, none of that species to be seen in this spot. Great clumps of kikied *S. parviflorus* could be seen hanging by just a few contorted roots. These roots often corkscrew around each other to form an orchid root 'rope'. This is in complete contradiction to the habit of the type form of *Sarcochilus olivaceus* which I have rarely seen on limbs of less than finger thickness. It is mostly found on the major limbs and trunk of its host. Another contradiction to the normal habit of the type form of *S. olivaceus* was, and equally as blatant, is where this '*parviflorus*' had colonised. Most of the considerable number of examples I observed where way up a hill side, a long way from a dry watercourse . . . in fact they were doing it quite hard in the midst of other species that are noted for their preference for harsher conditions. As well as the Sarcanthinae species mentioned, there were also numerous specimens of *Dendrobium speciosum*, *D. monophyllum*, *Dockrillia teretifolia*, and *D. bowmanii*. All of these tend to avoid the shady, damp recesses where the type form of *S. olivaceus* eagerly colonises.

So, considering all the ways in which '*parviflorus*' differs from *S. olivaceus*, (colour, shape, distribution, habitat and positioning on its hosts - is there much else?) It isn't suprising to see that most enthusiasts and professionals now see *Sarcochilus parviflorus*, as a true species. The only similarity between the two is perhaps the vegetative features of the leaves. These tend to be thin and wafery compared to other *Sarcochilus* species.

In my opinion, the distinctions between *S. hartmannii* and *S. fitzgeraldii*; *S. hartmannii* and *S. equalis*; and *S. hillii* and *S. minutiflos*, are no greater than those between *S. olivaceus* and *S. parviflorus*. Yet, we accept these as species in their own right . . . why not accept *S. parvilforus* in the same spirit?

S. olivaceus as I have just mentioned, prefers the coolness of a mountain creek rather than exposed ridges or the canopy of the rainforest. It frequently colonises the Water Gums along such creeks. It is also at home on the Myrtles (Backhousia) that inhabit the belt of trees just behind the Water Gums. In some areas, such as the Royal National Park to the south of Sydney, huge plants can be seen on the bottom metre of the trunks of these Myrtles. Such positions are not bright enough for most orchid species but *S. olivaceus*, with its ability to produce extra wide leaves, can gather enough light down there to satisfy its needs. Further south into the Illawarra *S. olivaceus* can be seen to grow on rocks, usually with quite long roots. Up in the Blue Mountains I know of a good colony growing on bucket-sized rocks on the floor of the rainforest. It doesn't take long for the roots to descend into the leaf litter where they get chewed up quickly by the subterranean insect community. These plants seem to maintain vigour under these unusual damp and dark conditions. I wouldn't recommend that anyone should try this method of cultivation in the bush house, all the same.

More so than with other Sarcanthinae orchids, *S. olivaceus* is capable of growing very long roots in captivity. For this reason it is beneficial to attach specimens to long mounts . . . and long lasting mounts at that. As the roots keep snaking around the mount they quickly form a maze and any attempt to remount a long established *S. olivaceus* plant would mean damaging the root system to a greater degree than would happen with many other species.

Something I've observed over the years is this. If you hang up a plant each of *S. olivaceus* and *S. falcatus* side by side, mounted on the same size and shaped host (a piece of cork, say), the roots of the *S. falcatus* will tend to stay on the front of the cork or run along the edges. *S. olivaceus* roots, on the other hand, will keep growing right around onto the dark, stark rear of the mount . . . the side that must not get much water unless you are heavy with the hose. These "back roots" remain quite fat and healthy and seem to grow with speed. I see this as another example of how darker conditions won't affect *S. olivaceus* with to much degree.

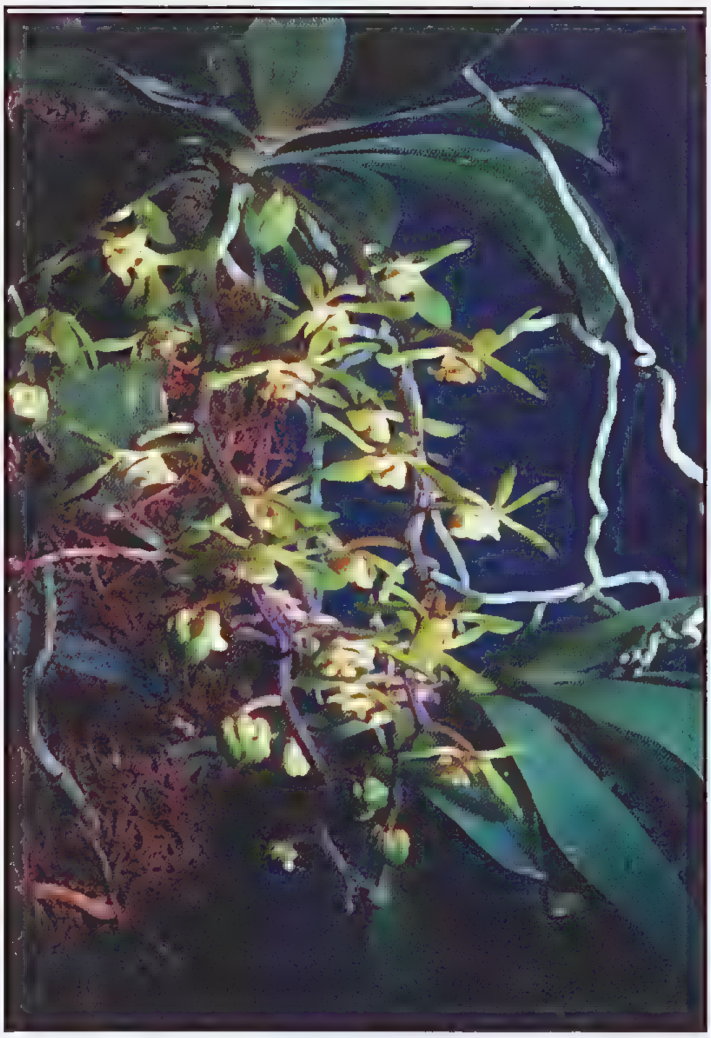
This all points to *S. olivaceus* being an easy orchid to grow. However, it is subject to, like most of the Sarcanthinae species, that dreaded crown rot that can decimate a seemingly healthy plant in just a few days. I have christened this condition SSDS; 'Southern Sarc. Death Syndrome'. Anyone who has grown a mixed collection of epiphytic Sarcs., will know exactly what SSDS is. It generally means the death of the plant but it can, on rare occasions, lead to better things.

This happened to a superb clone of mine that had won me more prizes over the years than nearly any other orchid in my collection. But the good news is that, although the plant looked completely dead, the roots remained healthy. After around four months of hibernation three 'kikis' began growing from the old rhizome. Today this 'clump' is nearly full size again but with the added bonus of three separate growing leads. Watch out show bench!

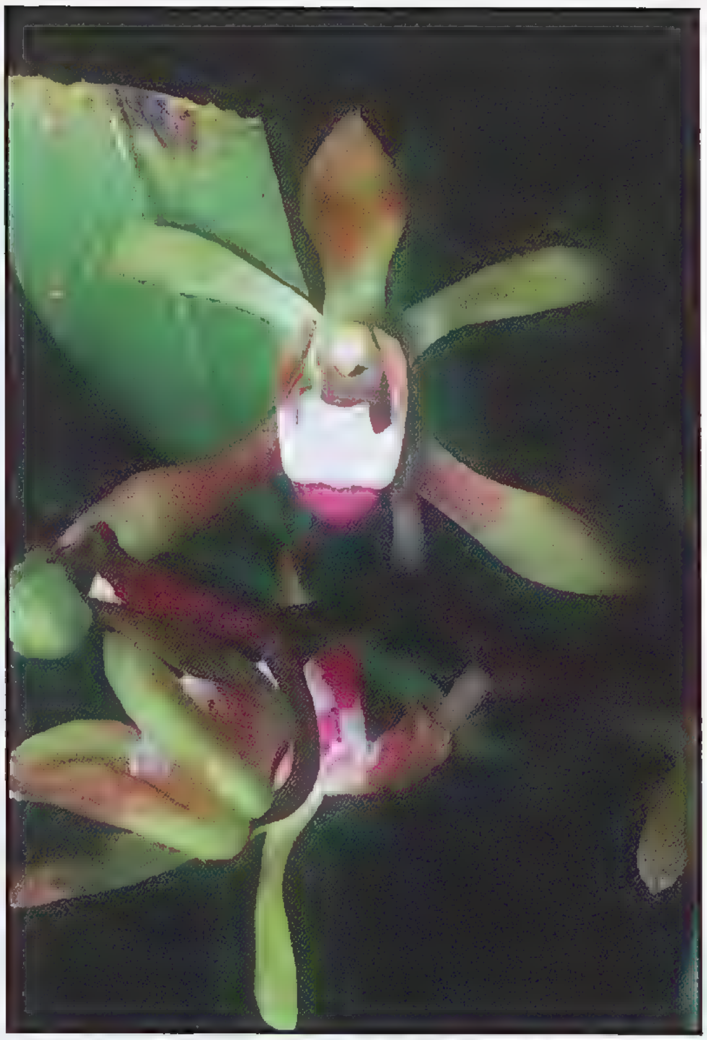
Here is a species that I prefer to grow on cork, and long lengths of it. Most other materials will suffice however, but for once I don't advocate the use of tree fern fibre, which I tend to use with a lot of our native orchids. For starters it is difficult to cut tree fern into long narrow strips . . . thin, long lengths of tree fern tend to fall apart after a few years. It is best used in chunkier lumps.

The good news for novice growers is that *S. olivaceus* is quite an abundant species in the bush houses of Australia and you should have no trouble picking up a plant for yourself. It is a rewarding, showy species and quite undemanding in its requirements. And it never fails to flower each and every spring. As an added bonus, the perfume of *S. olivaceus* is both potent and sweet. No wonder it is one of my favourite species.

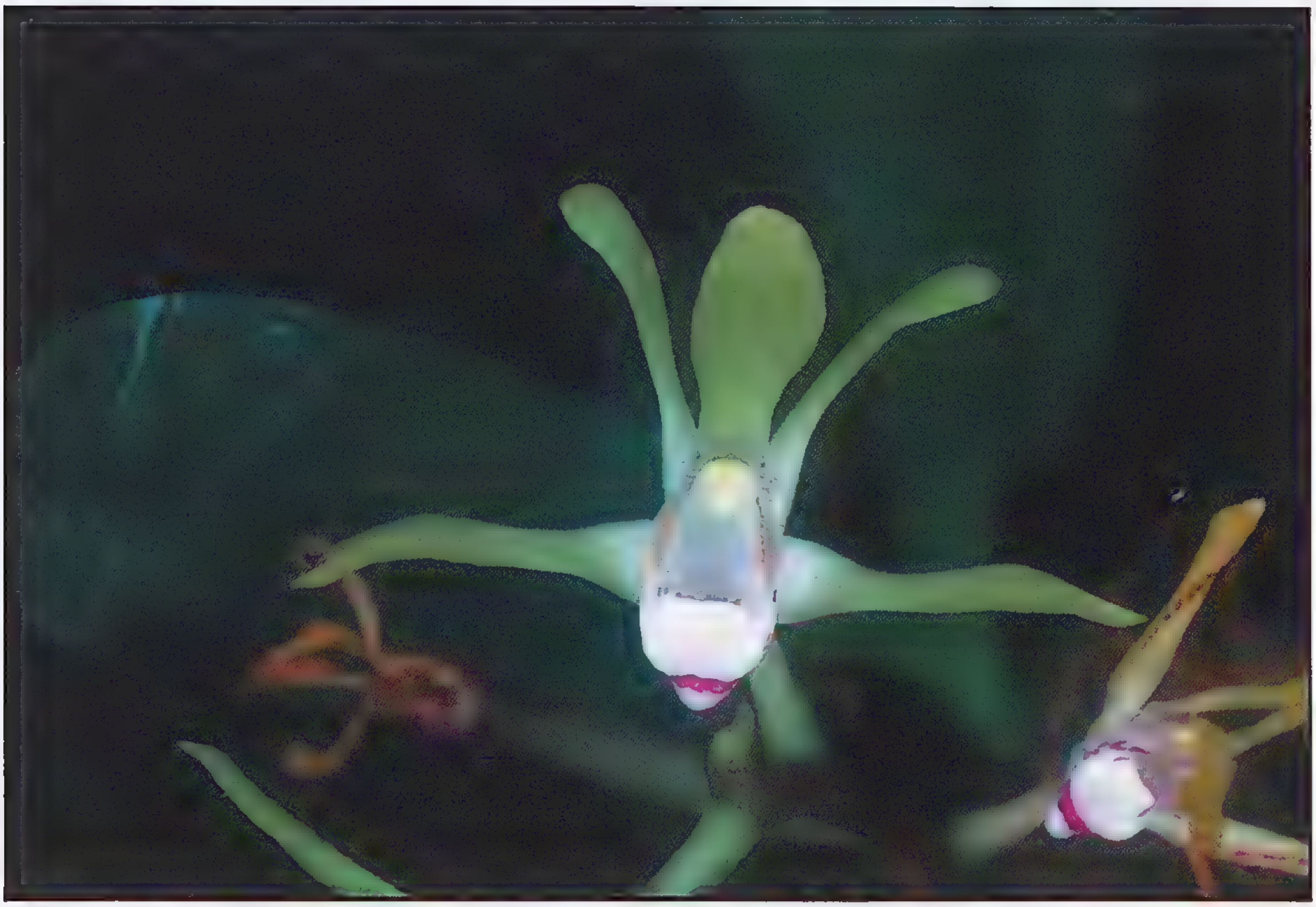
-oOo-



Sarcochilus olivaceus



Sarcochilus affin. *borealis*



Sarcochilus borealis ex Mt Lewis

Photos David Titmuss

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Orchids in the Dust

Orchid Journey: Western Australia in a drought year.

Part 1: North of Perth

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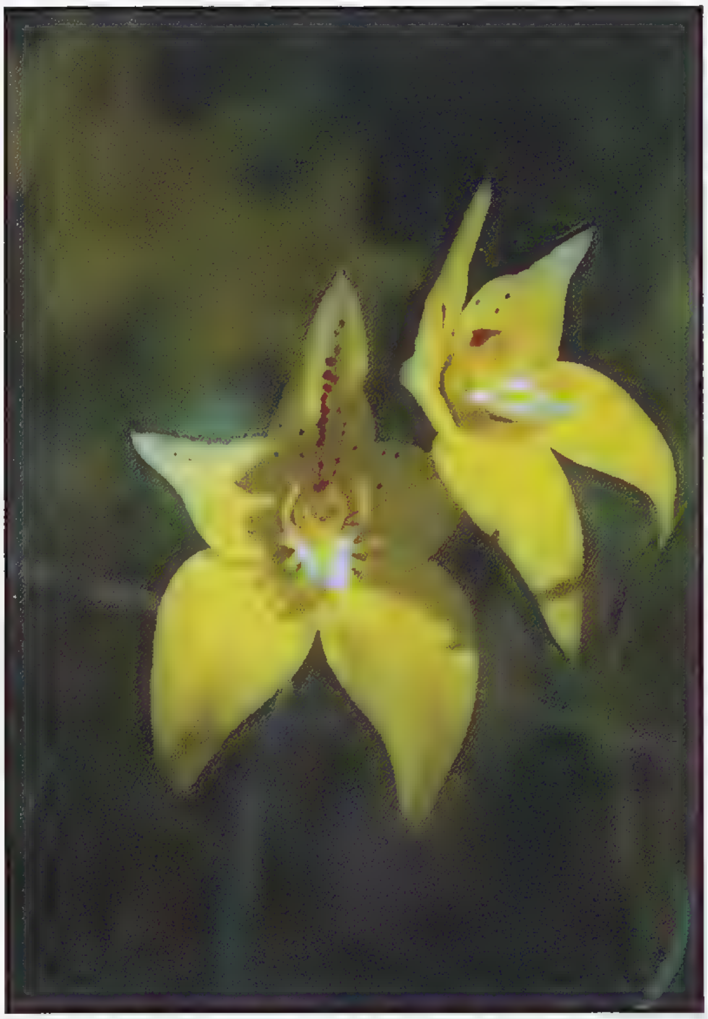
Visions of heat, dust and orchids that have finished flowering, nagged in the back of my mind. But I needed this trip to Western Australia! Despite the drought, and a late start, I longed for the restorative influence of the bush, orchids or no orchids! With a bit of luck and a bit of planning, we fluked a journey that brought rewards, orchid and otherwise, and settled the dust in my mind. When seeking terrestrial orchids in Western Australia, it is helpful to recall that most of the orchids will be found south and west of a line extending from Kalbarri (and the lower Murchison River catchment) in the north to Israelite Bay in the south with a greater number of species occurring as you move into the wetter areas of the southwest.

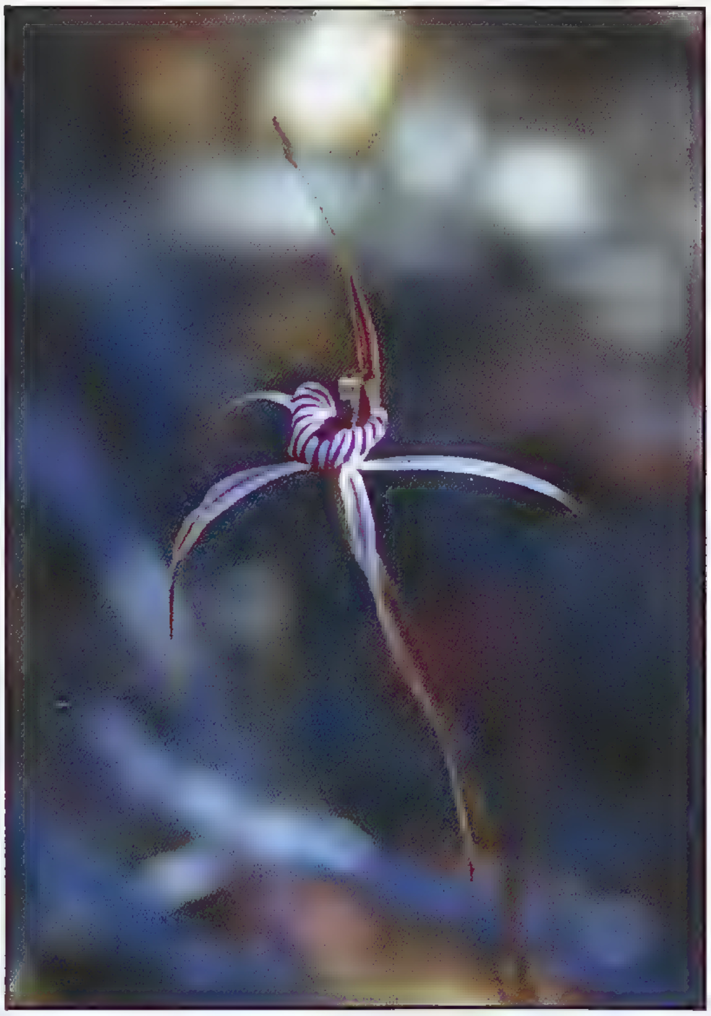
Our search began at Eurardy Station, 600 km north of Perth, 60 km inland from Kalbarri and adjacent to the National Park on 7th September, 2002. This area had not been severely drought affected as adequate rainfall had come down from the north. Eurardy is a working sheep station that once stretched to the banks of the Murchison River. A southern parcel of land was acquired by the government and included in Kalbarri National Park, in 1960s. The Station retains 28,000 hectares that is primarily bushland with only 2500 hectares intensively farmed. It shares many of the floral values with the National Park both having large areas of Kwongan, the aboriginal term for "sandy country with open scrubby vegetation". The station also has some species, such as the *Verticordia eurardiensis,* endemic to the station. Margaret and Bruce Quicke, who have owned and managed the station since the late 1970s, offer meals, accommodation and camping for travellers. Margaret fondly refers to the 300 hectares that are actively managed for floral values as her "flower garden" and provides guided tours at a reasonable price.

We camped near the house where Red-tailed Black Cockatoos, Splendid Wrens, and Red-capped Robins were frequent visitors. Within close walking distance, rich pink Parakeelya (*Calandrinia polyandra*) carpeted open paddocks. Prickly Plume Grevillea (*Grevillea annulifera*) bloomed luxuriantly, pale yellow with a blush of pink, and a rich, heady perfume. Scarlet Featherflower (*Verticordia grandis*) was eye catching. Over the fence south and west of the station, a sea of blue grey smoke bush extended across Kalbarri National Park.

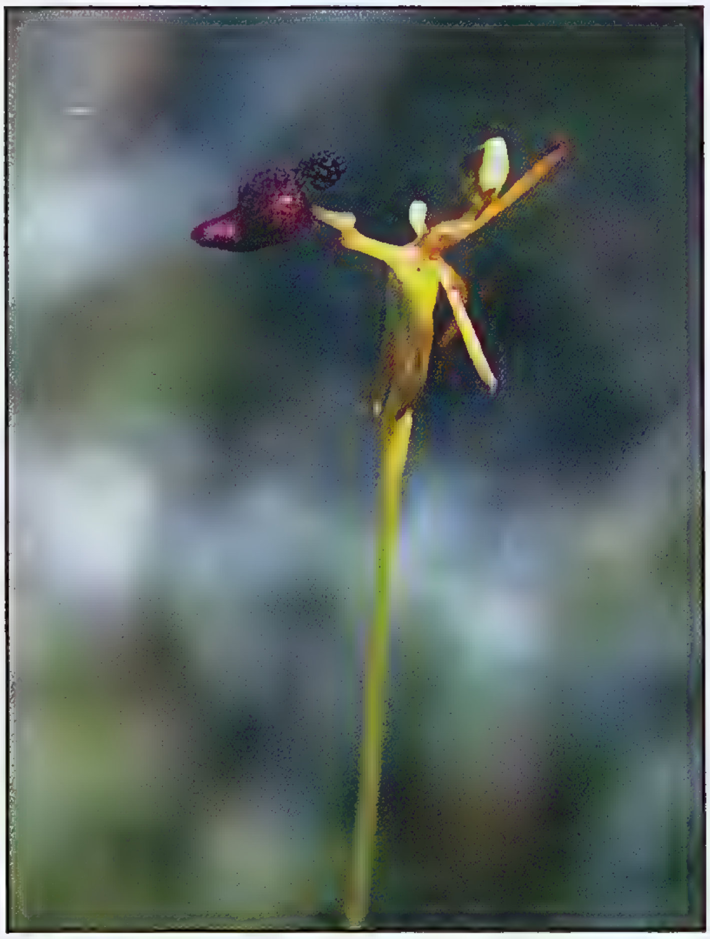
The most northerly orchids found on our trip were photographed here. The Freckled Sun Orchid (*Thelymitra sargentii*) that is known to survive in remarkably dry inland areas was found at the edge of a sandy track near the top of a rise. Near the National Park border, tucked safely under a stand of Acacia and Grevillea, we found the Kalbarri Spider Orchid (*Caladenia wanosa*) named to recognise contributions to orchid knowledge by Western Australian Native Orchid Study and Conservation Group. This orchid is found mainly in the Murchison River area along tops of gorges, but a population is



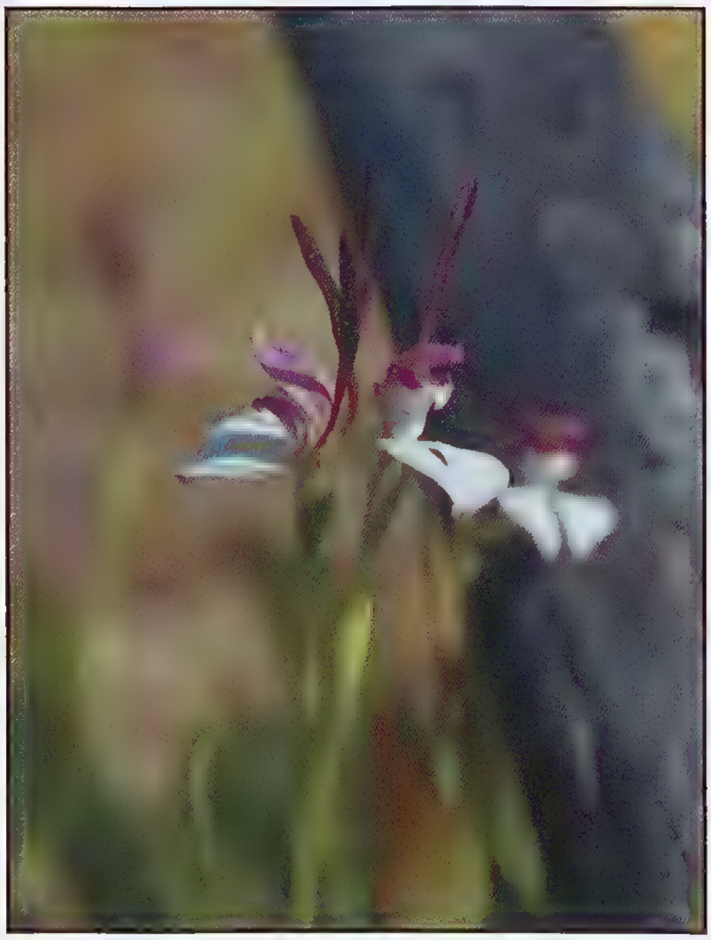
Caladenia flava, Wongamine Nature Reserve. The most common orchid found on the trip.



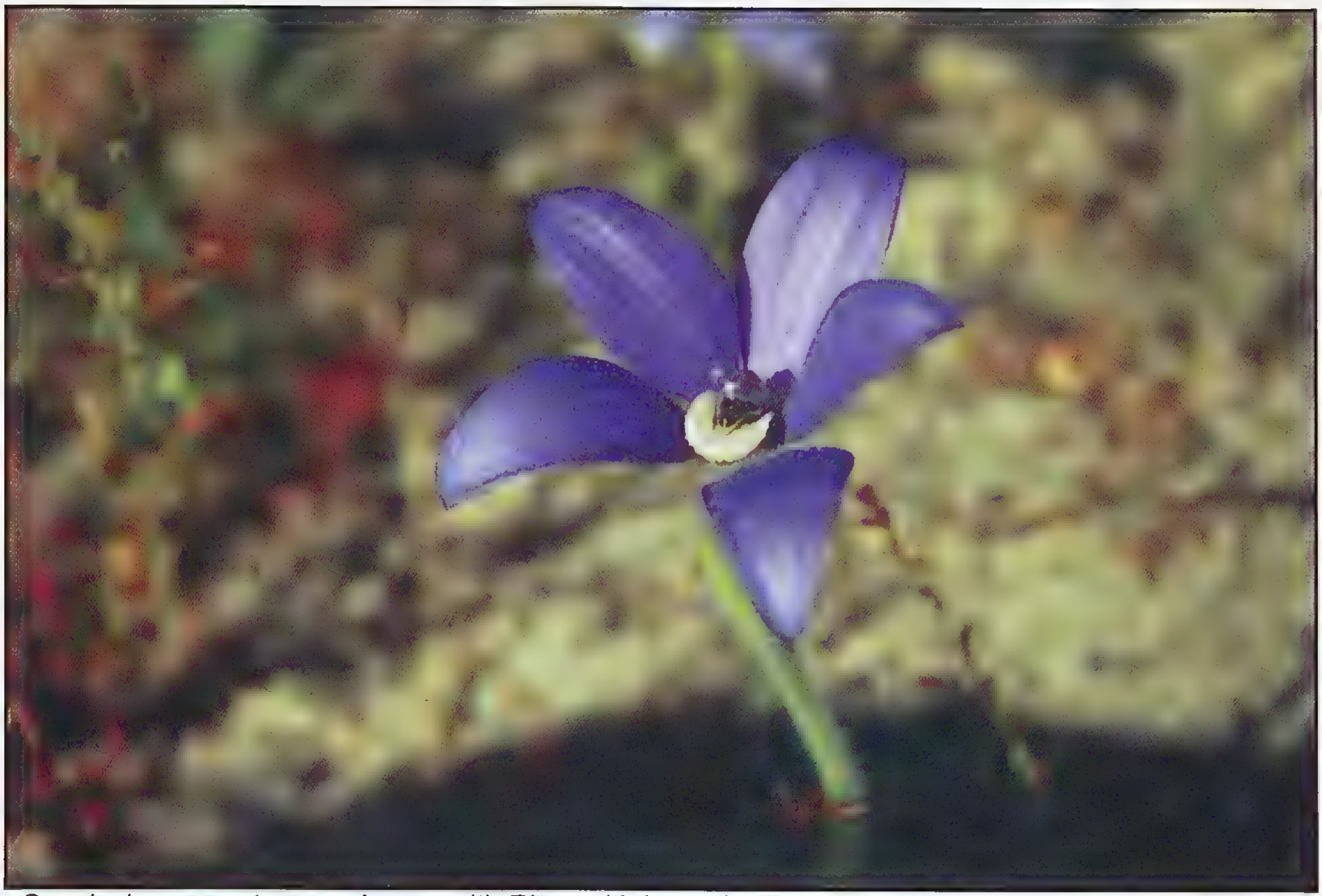
Caladenia wanosa, Eurardy Station.



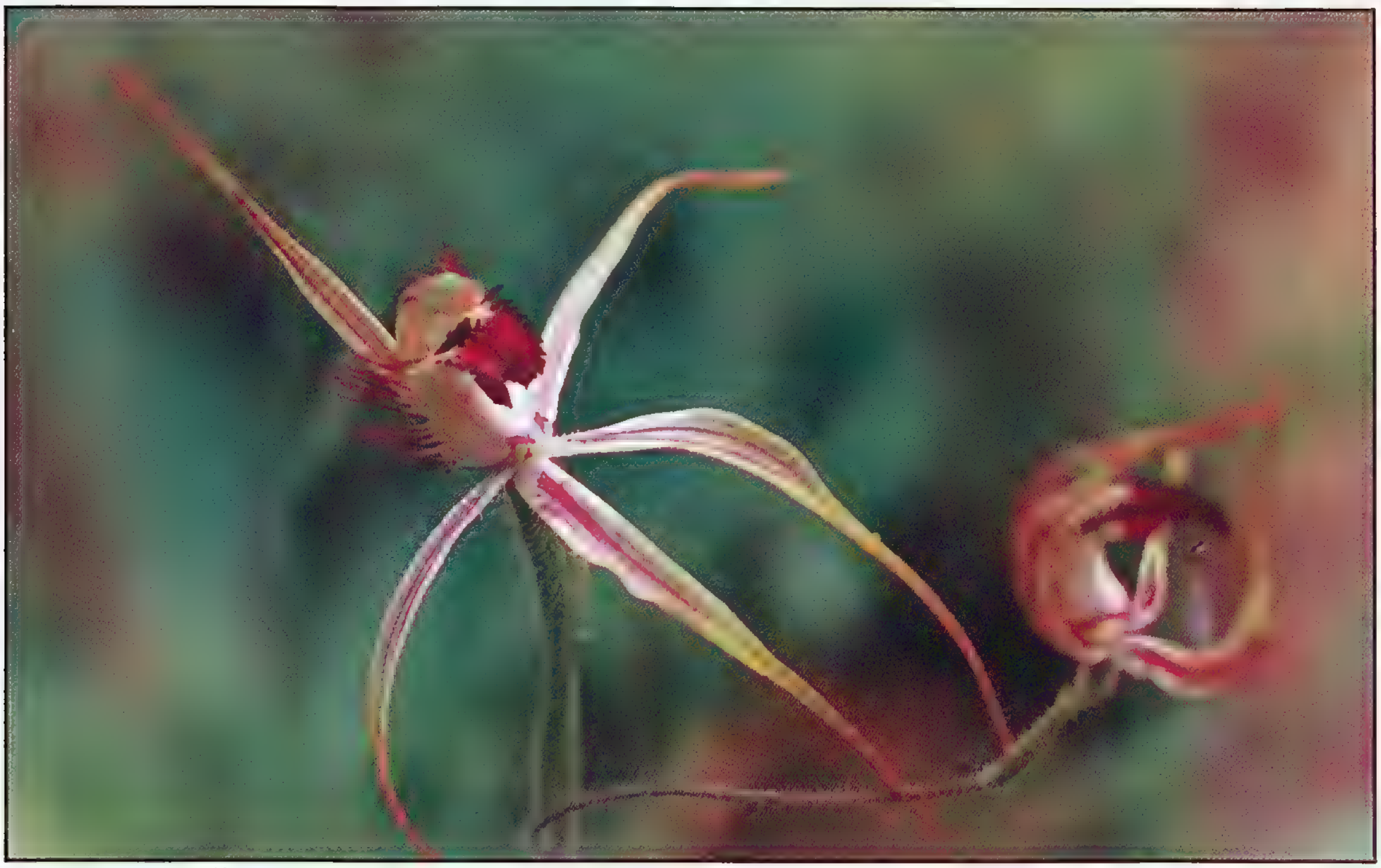
Drakaea glyptodon, Lake Logue Nature Reserve.



Leptoceras menziesii, carpeted metres of burnt land near the Arrowsmith River.



Cyanicula gemmata, near Arrowsmith River with insect/pollinator.



Caladenia hoffmanii, Murchison River Gorge, September 1997.

also known near Mullewa where it grows in a narrow roadside remnant under tall shrubs and Mallee eucalypts in deep, red sandy soil. Nearby was the third orchid photographed in Eurardy, the Small Dragon Orchid (*Drakonorchis barbarella*). It is found only in a few populations restricted to the lower Murchison River and was first discovered here at Eurardy by Alex George in 1969. Both this Drakonorchis and the *Caladenia wanosa* are listed as endangered. A *Pterostylis aff. nana* was also photographed here.

The general richness and colour in the managed bush area was impressive. The Quickes believe that allowing light sheep grazing from November to May gives the shrubs a tip pruning that enhances blooming without having a significant effect on the ground flora. They also use fire as a management tool if a lightening strike doesn't occur within eight to ten years. Management by current and future property holders on this and nearby grazing properties will determine long term survival prospects for this flora.

A short drive on the North West Coastal Highway from Eurardy, took us to the Galena Bridge where we crossed the Murchison River. The riverbanks are heavily utilised by campers and in this dry year, little under story vegetation was seen so we proceeded to the south eastern entry to Kalbarri National Park. The Ajuna Kalbarri Road is a magnificent corridor of medium to tall blooming shrubs. This year the cream blooms of *Grevillea leucopteris*, on racemes high above the foliage, were just starting to emerge from their pinkish bracts exuding the well-known "Dirty Socks" odour. The Tree Smokebush (*Conspermum triplinervum*) predominated with its mauve-grey waves from road to near the edges of the gorges. These dramatic gorges were carved over millions of years by the wind and the Murchison River cutting and shaping the red, brown and white layers of the Tumblagooda sandstone. The Murchison, often a low flow river and sometimes, nothing more than a series of pools, is dependent on summer cyclones in the north of its catchment to produce high flows.

The 8 km loop walk descending from Nature's Window to the Murchison River allowed close examination of some these eroded cliffs. No Drakonorchis were to be seen here, where we had photographed them on 3rd September, 1997. Neither did we see the *Caladenia hoffmanii ssp. hoffmanii* from the same location. Were we too late for Kalbarri N.P. orchids?

Later, near the car park for the Z bend, heading for the toilets, we spotted tiny orchids in the rocks and sandy soil amongst low growing purple Calytrix. A check of our Hoffman and Brown confirmed the Kneeling Hammer Orchid (*Drakaea concolor*) and Smooth billed duck orchid (*Paracaleana terminalis*). Good finds as both have very restricted distribution and the former is listed as endangered. We were concerned that the numerous goats we had seen in the cliffs nearby could threaten the delicate ground flora. A CALM officer confirmed that they are a major management challenge. The day was completed with a foot-soothing walk in the cool waters of Murchison River Estuary and a dinner of Prawns and Barra at the Finlay's Fresh Fish BBQ. The story of this restaurant starts with the pilot strike in 1980s. The local fish catch was in danger of spoiling. A massive BBQ was put on for the town of Kalbarri. The restaurant has grown from there and could be described as "rough as guts" but what is lacked in polish is made up for in delicious taste and character. A wonderful way to relax!

The journey continued southward about 50 km. Just a tease of orchids was sighted in the gravel pit near Northampton, mainly *Caladenia flava*. We were interested in this hilltop location because of the obvious diversity of wildflowers and because it is said to be a locality for *Caladenia elegans* blooming earlier in the season. *C. elegans* is listed as critically endangered. The Northampton Herbarium Group has located additional populations, but this orchid still requires protection. Rubbish was being dumped in this area and gravel removed. The nearby Yerina Springs that is naturally wet by seepage sported masses of yellow featherflower (*Verticordia chrysantha*) that nearly obscured the Little Laughing Leek Orchid (*Prasophyllum gracile*), the Blue China Orchid (*Cyanicula gemmata*) and finished *Diuris* sp. This area appeared to be subject to grazing pressure.

The 17th of September was a significant day, not because of orchids seen but due to the promise of things to come. From Greenough River Caravan Park (380 km north of Perth), we headed out for a day trip, including the low scrub of Burma Road Nature Reserve. We parked behind a white hire car where a portly gentleman leaning heavily on a walking stick and laden with camera gear wandered over. He sounded British and knowledgeable as he described what he'd seen in the reserve, and consulted weighty tomes that he said were the definitive "Flora of Australia". .

"Two plants of note are the Burma Road Banksia (*Banksia scabella*) and a *Diploleana*" he said, "Really quite rare! Just down that fire break, you won't miss them!"

When I asked had he seen any orchids, he answered with a sly look, "Not here. Are you heading south?"

I said we were on our way to Western Flora near Enneaba..

"Well, there is one down that way. People have thanked me when I told them about it. A sun orchid, The Queen of Sheba!"

I came to attention at that!

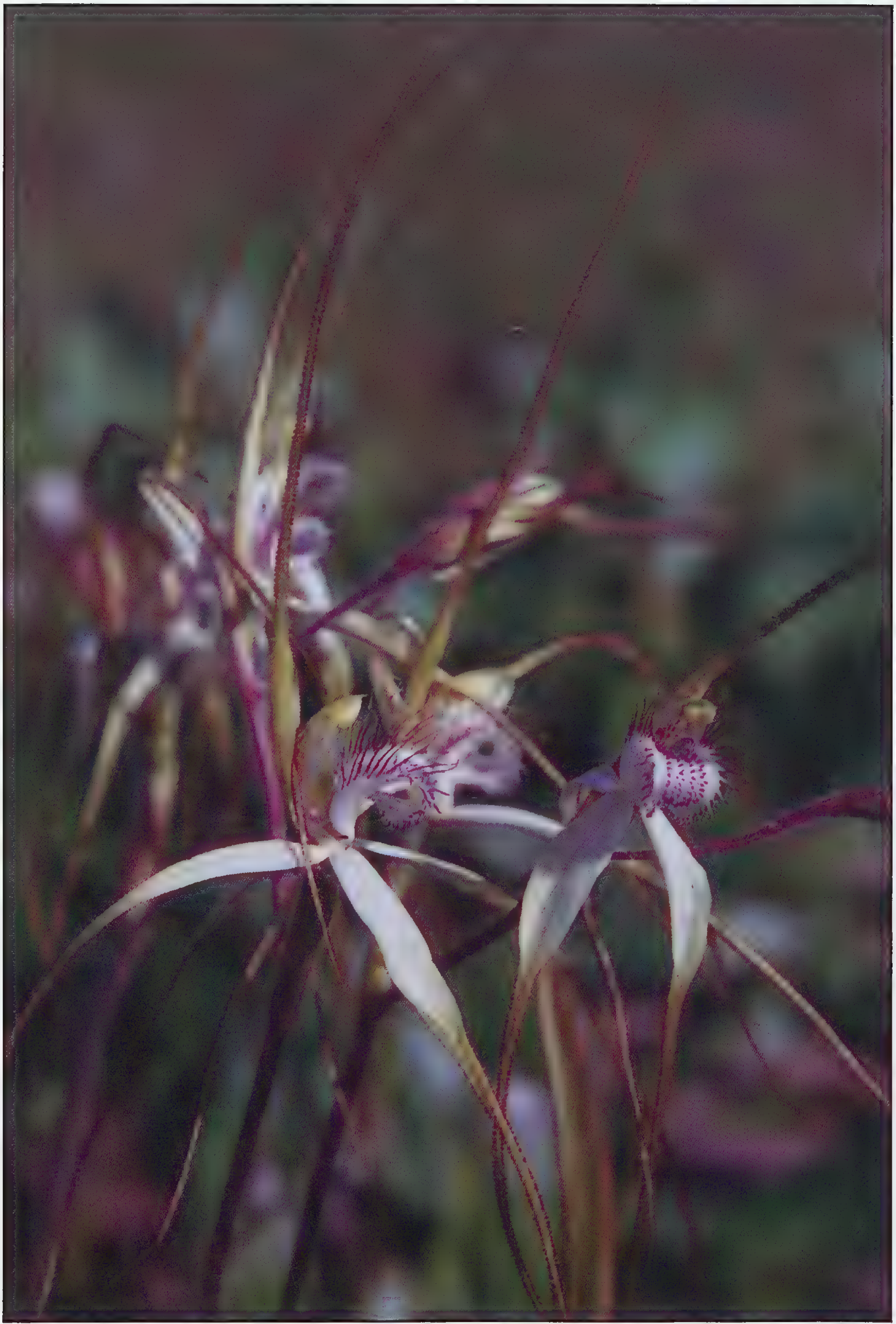
We marked the map with this location 100 km further south and tucked this information away, like the treasure it was. I realised too late, we hadn't found out his surname. We did know Alan was a botanist, born in New York but was trained and working in the UK. He had come to Western Australia for the spring blooming every year for the past seventeen years. Banksias are his special interest. We drove on, wondering.

50 km from Burma Road, a stop at Yardanogo Reserve yielded little but some small *Caladenia latifolia*. We were just about to leave when Peter spotted the Arrowsmith Spider Orchid (*Caladenia crebra*). Ants milled around the site, so I spread my jacket as protection for a few quick shots. "Just one more! Youch!" The ants bit but I got my photo!

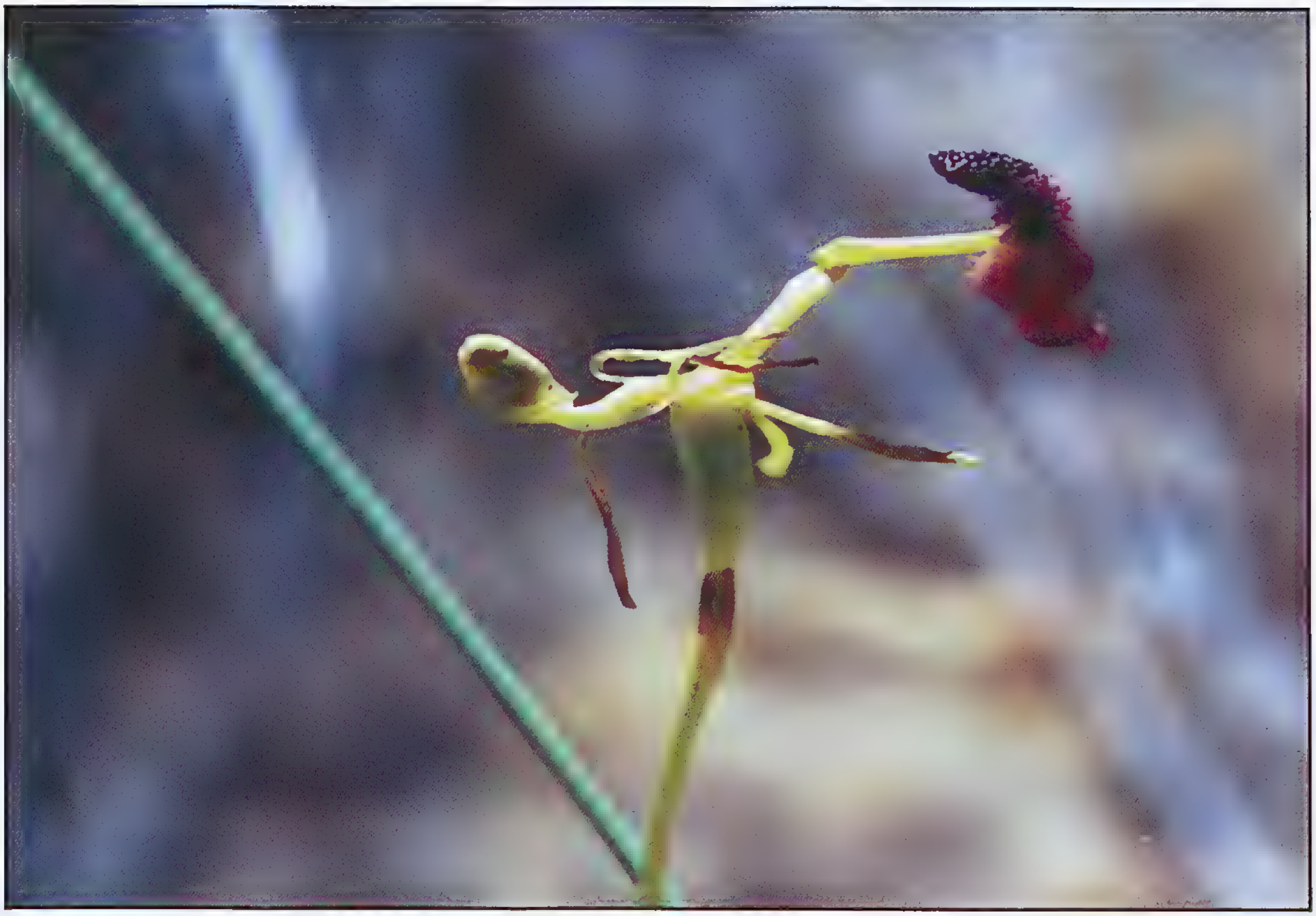
We reached Western Flora Caravan Park on 19th September. The good news and the bad news came from Alan Tinker, owner of Western Flora and passionate advocate for the local flora. He said we were too late for the Queen of Sheba but there should still be a good general display of orchids across the road in the burnt area near the Arrowsmith River. He said that *Cyanicula gemmata* and *Caladenia antenifera* had been virtual carpets in places and we should find at least eight species. This Kwongan scrub, in the centre of sandplain country, is in near original state with little significant clearing nor stock use in the past. According to Alan, this area was noted in the "red book" as deserving of protection. This proposal was held up for some time due to mining company claims (over 80% of the world's rutile is located in the Enneaba area). The miners were over ruled but the outcome has been further slowed by Mabo concerns. Alan Tinker believes reservation of this land is pending.

However, designation as a Nature Reserve would be only a small first step in conservation of these sand plain areas for their floral value. Even in reserved areas flora, is at risk. Feral animals including horses, goats and even feral bees (through inappropriate pollination and competition with native pollinators) create a threat to the above ground portions of native orchids. This situation is made worse by feral pigs, apparently released by those who shoot pigs for sport. Where the pigs are rooting, orchid tubers are at risk.

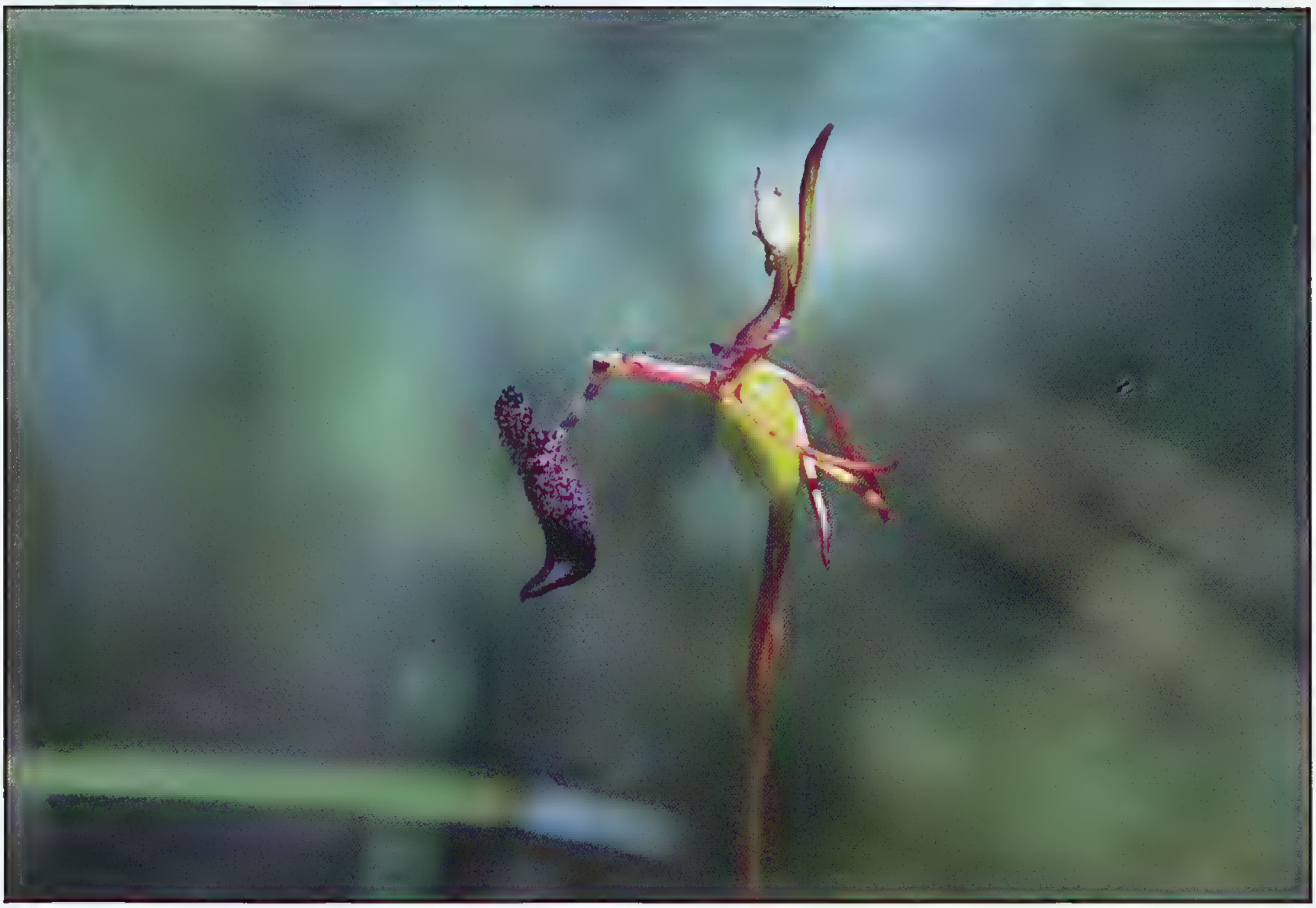
Inappropriate timing of controlled burns is another risk. Alan points out the economic pressure is for burns at the wetter times of



Caladenia longicauda, one of the many clumps flowering in the burnt area near the Arrowsmith River.



Drakaea concolor, found along the clifftops at Kalbarri National Park, nearly finished with ovary starting to swell



Drakaea livida, Hi Valley Farm.

the year, that require less staff to control but can be disastrous for many species, including orchids. These factors create an enormous challenge to CALM and the officers who take an interest in floral conservation.

The Arrowsmith River drains a catchment in the highlands and then ends in lakes on the Eneabba plain. There was very little or no water in its bed where we observed it.

We set off for the day armed with one of Alan Tinker's mud maps. The burnt area yielded nine species, including *Pyrorchis nigricans*, mostly common and wide spread. This was the only other spot we saw *Caladenia crebra* this trip and here it was nearly finished. I felt pleased I had persisted with the photos at Yandanogo Reserve. Tiny Rabbit Orchid (*Leptoceras menziesii*) blooms were a thick carpet. Daddy-long-legs Spider Orchid (*Caladenia longicauda ssp. borealis*) was in profuse clumps but half of each clump had finished. *Cyanicula gemmata* was widespread. The one I photographed had an insect, perhaps a native bee, tucked in above its labellum. In addition to orchids Cats paws, Drosera, Lobelia and Wahlenbergia made a lovely show. I could have spent the day exploring here but it was just possible that the Queen of Sheba bloomed ahead in the Lake Logue Reserve.

Just 20 km further south, Lake Logue Reserve consists of intradunal coastal lakes and surrounding sand plains. A part of the Stock Route passes through the Lake Logue Reserve, so cattle were driven through as recently as the celebratory Bicentennial Drive. At Lake Logue Reserve, we followed the British botanists' instructions precisely searching animal pads back and forth through the low scratchy scrub. We found the Blue Shirt Orchid (*Thelymitra campanulata*), Common Mignonette Orchid (*Microtis media*), Hammer Orchid (*Drakea sp.*) with ovary starting to swell, Purple Enamel Orchid (*Elythranthera brunonis*) and other plants including Pipe Lily (*Johnsonia pubescens*) and Fringed Bell (*Darwinia neildiana*). This was a rich area but where was the Queen? About to admit defeat, I spotted a finished single Thely with just a hint of purple remaining. Then, glistening in the afternoon sun, the regal gold and purple petals of Northern Queen of Sheba (*Thelymitra aff. variegata*) in all her glory. One of three recognised taxa in the Queen of Sheba group, this would be hard for me to top. Although not rare, it is definitely hard to find in full bloom and distinctive in its beauty.

We repeated our tale (of the British botanist and the Queen), to fellow campers.
"That has to be Alan Hammerschlag of Kew Gardens Banksia House! He stays with us every year in Perth during his botanical travels. He will be returning after his explorations this year. I'm so pleased he finally found the Queen!" said the Perth resident. We were able to send our thanks after all.

By 23rd September I was feeling torn between spending more time in these diverse areas with so much that was new to me and hurrying on south where orchids may be more plentiful this late in the season. But just 40 km further south sits Lesueur National Park and Coomallo Nature Reserve. As described by CALM Management Plan, "The Mount Lesueur area's strikingly eroded laterite landscape was once dismissed as worthless scrubland, useless to farmers and pastoralists. But it has long been a mecca for botanists, and is now protected in the 26,987 hectare Lesueur National Park". Even if we were too late for most orchids, I couldn't justify passing here without stopping where nine hundred species of flora represents 10% of the flora of W.A. Since no camping is allowed in this National Park, we chose to camp at the private Hi Vallee Farm on Tootbardi Road.

Here was an excellent base for exploring the National Park, Tootbardi Roadside reserves and the significant flora on the Farm property itself. Camping was pleasant with portable toilets and plenty of space. The hosts, Joy and Don Williams, were helpful and friendly. They indicated that The Cleopatra's Needles (*Thelymitra apiculata*), bloomed on the ridge in their property (nearly National Park quality in itself). We decided to take a day to search for this beautiful orchid, discovered in 1965, and that is closely allied to the Queen of Sheba. New orchid species proved hard to come by. Diligent searching of the indicated area found Warty Hammer Orchid (*Drakaea livida*) and Banded Greenhood (*Pterostylis vittata)* but no sign of Cleopatra's Needles. It was clearly a case of "You should have been here two weeks ago."

The following day was allowed for walking in Mt. Lesueur NP. Intermittent sunshine then deluge had us alternatively walking and crouching for cover under our ponchos behind any chest high scrub we could find. Only common orchid species were spotted but I was fascinated by many plant species that were new to me and photographed the Lesueur Southern Cross (*Xanthosia sp.)* Clearly a return to this area in a future spring will be warranted.

We had planned a visit to the granite outcrops of Wongan Hills before heading to Perth, 180 km southeast. An overnight stop convinced us this was too far inland for blooms at this longitude in such a year. Only dust and a legless lizard (*Pigopus lepidopodus)* were seen where orchids should be. We headed toward the coast and Perth. Travelling west, crossing an invisible line some where east of Northam, we began to see evidence of more adequate rainfall.

We stretched our legs at Wongamine Nature Reserve, less then 100 km east of Perth. This small reserve has a mix of flora including patches of Kwongan over laterite hills and both Wandoo and York Gum. Here we photographed four common species including a *Caladenia longicauda* with a commensal white spider. I also puzzled over a prostate Acacia species, no taller than 2 cm, carpeting metres of the woodland.

Over three weeks in September we travelled a strip of land 600 km by about 100 km and felt we had barely scraped the surface. My orchid list showed around twenty two species. This low number didn't discourage me as it included finding four that are endangered or of limited distribution and the diversity of the broader flora was adequate compensation. Conservation issues exist in all areas leaving no room for complacency. Rather we must all find ways to support the efforts of those charged with the management of these floral treasures.

It was vital to my husband that we reach Perth by 28th September as he had booked a seat on a friend's couch to watch Collingwood playing in the Grand Final. For him their being in the final and nearly winning was the highlight of September. For me the highlight was definitely photographing the Northern Queen. I could not help wondering what adventures awaited us south of Perth.
(Next issue Part 2, South of Perth)

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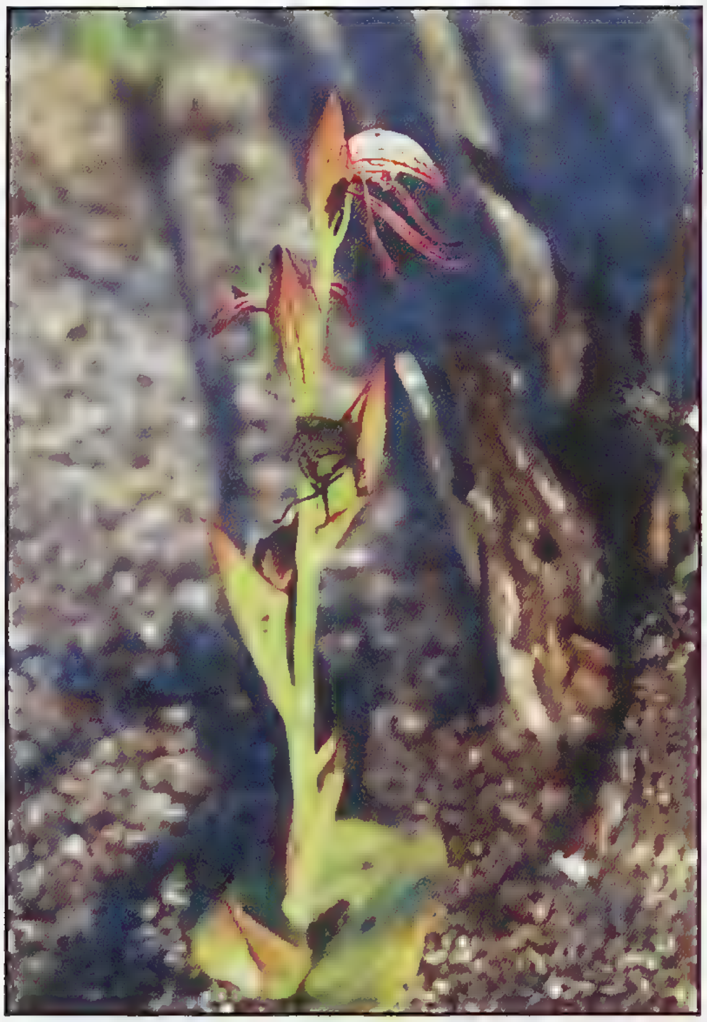
Threatened Wildflowers of the Mid-West by Alanna Chant 2002.

Guide to the Wildflowers of South Western Australia by Simon Nevill & Nathan McQuoid.

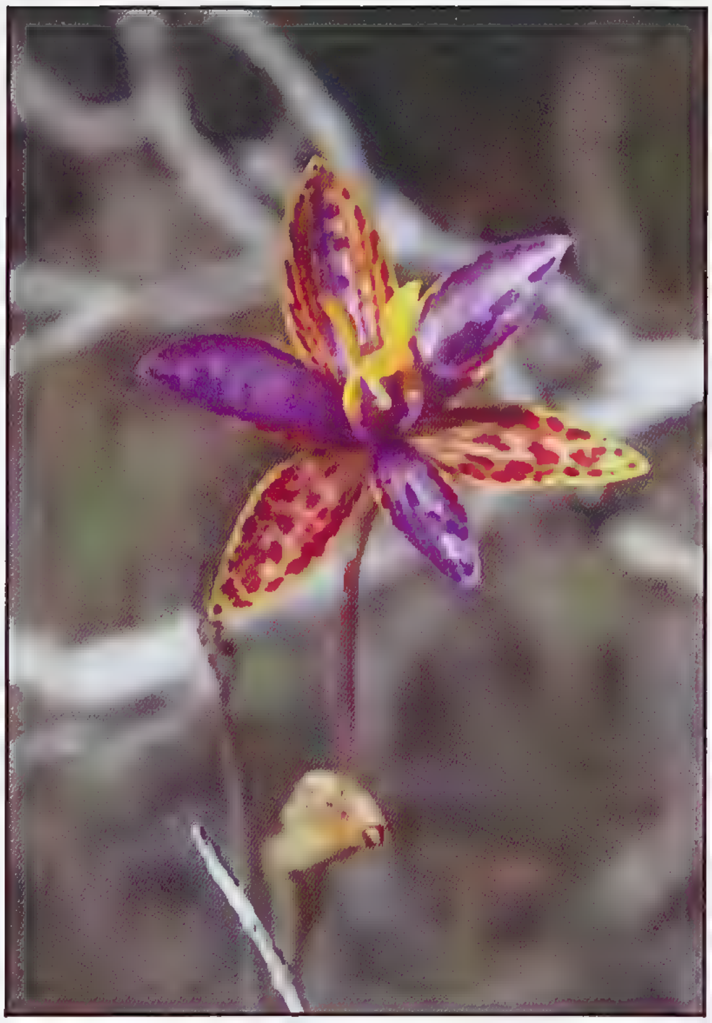
Wildflowers of Southern Western Australia by Margaret G. Corrick & Bruce Fuhrer 1997

Kwongan Connections, Wildflower Drive of the West Midlands Region CALM

-oOo-

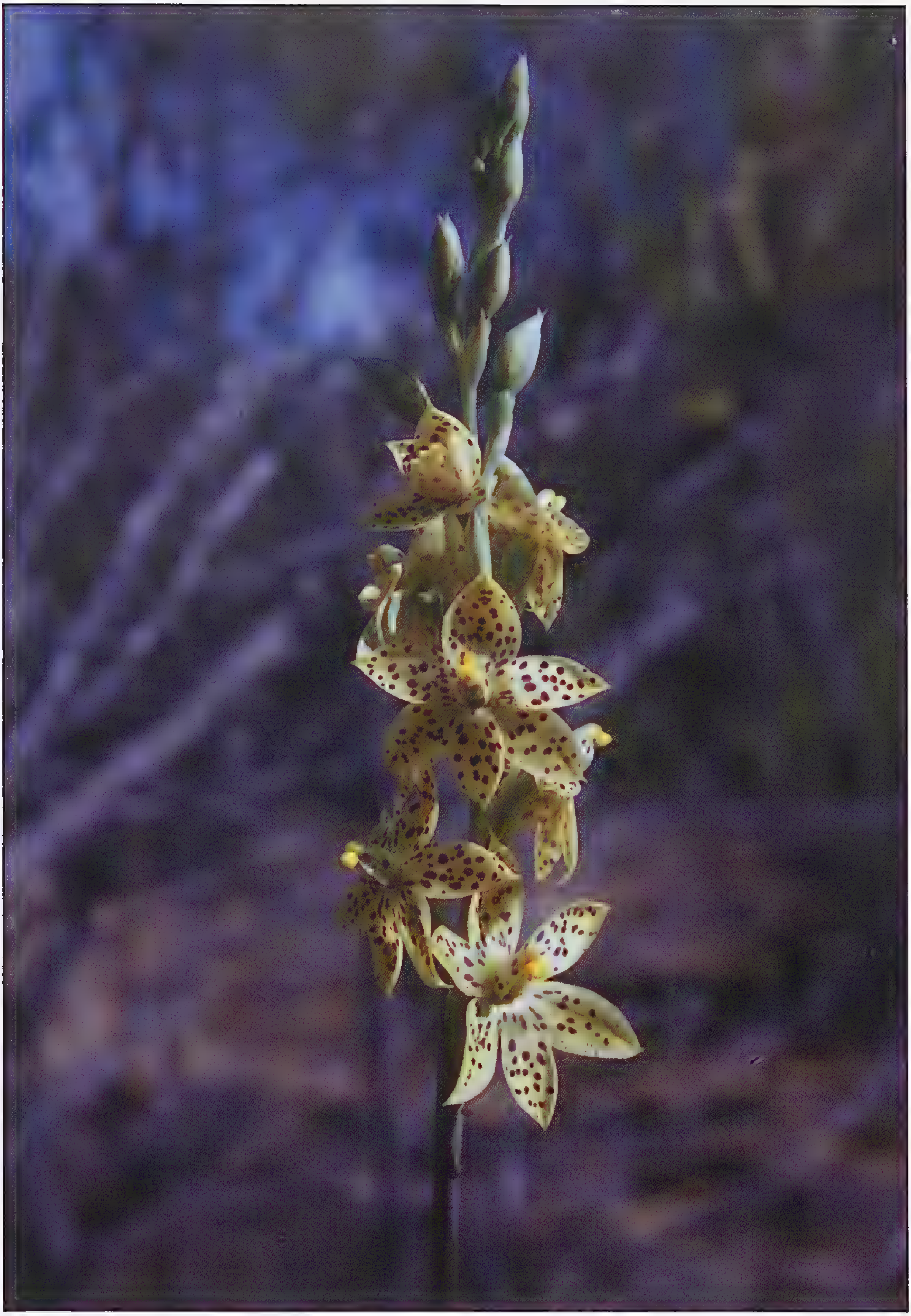


Pyrorchis nigricans, in burnt area near Arrowsmith River.



Thelymitra affin. variegata, Northern Queen of Sheba, Lake Logue Nature Reserve.

Murchinson River Gorge.



Thelymitra sargentii, Eurardy Station.

Photos Linda Rogan

Letters to the Editor.

The Editor,
The Orchadian

Dear Peter,

I was very interested to read in the March 2003 issue of the description of a new species of Diuris, namely *Diuris byronensis* and of the successful efforts to protect what would appear to be the last colony of it. My mother, the late Joy Dunstan, nee MacNaught, was born in Byron Bay in the Duncan family home Clytham (sold in 1947 and renamed Victoria House) and when I became interested in Native Orchids and particularly terrestrials, told me stories of how there was a yellow Donkey Orchid growing in abundance in the heath surrounding her girlhood home and on the land around the Byron Bay Lighthouse. It would now seem that the orchid she was describing is the now endangered and renamed *Diuris byronensis*. May it be preserved.

I would be pleased if you could print this in The Orchadian as a letter to the Editor.

Keep up the good work,
Yours faithfully,

Rev. Peter Dunstan (Toukley).

-oOo-

Hello orchid growers,

A cooperative project involving RMIT University, the University of Melbourne and the Victorian Threatened Recovery Team is about to get underway. The project will record and document pests and diseases found on Australian orchid taxa, with a view to developing a reference "handbook", possibly accessible on the Web.
It will greatly assist the project to have growers of Australian orchids send in their diseased orchid plants or the pests associated with their orchids. The material will be photographed and the pest or disease identified accurately. Disease control methods may also be looked at.
If you can send in some Australian orchid pests or diseases, please contact me, Rob Cross, at the Royal Botanic Gardens Melbourne via email or phone

rob.cross@rbg.vic.gov.au
(03) 9252 2329

I will be able to give you the details of where to send them.You may find it useful to keep these contact details for future reference.
Thank you.Cheers, Rob

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-oOo-

Dear Peter,

Country living does have some disadvantages snakes, water shortages etc. but the major one I have found is that no one here grows orchids and therefore decent growing orchid bark is impossible to find in Yass, (my article, Orchadian Volume 14, No 3, page 110), and indecently expensive in Canberra (if available). The last time I needed some I had to go to Orchid Care at Windsor and that wasn't inexpensive either.
Therefore, I was delighted to receive The Orchadian today with the article by Murray Fielding from ANOS Victoria regarding the trials with horse manure as a growing medium. I had often pondered the possiblitity of sprinkling crushed horse manure as fertilizer but having a limited supply of orchids was not really prepared to take the risk.
Being the proud owner of two fat retired horses, I have decided to take the plunge and take a walk in the paddock later to gather some growing medium. I certainly have an unlimited supply of it, I may even make a trial of some dried and some fresh manure pots and monitor my results. The article didn't say whether to crush, break into smallish pieces or largish pieces.. so come the spring I will try them all. I will even try *Dendrobium speciosum* (or whatever the name is now) in unbroken lumps.
So now I am wondering about underneath my neighbours shearing sheds and the possibility of another easily accessed and readily available medium.

Regards to all, Nita Wheeler.

-oOo-

Native Orchid Show - Brisbane

The months of August and September are eagerly awaited each year by native orchid enthusiasts everywhere, as this is the time when those dependable favourites present their wonderfully perfumed heads of flowers for us to enjoy for all too short a time.

Each year seems to bring a significant improvement in the colour range and overall quality of these magnificent species and hybrids, as newer clones flower for the first time and previously previewed plants mature and show their best. This year will be no exception. In fact cultural conditions in the SE Queensland area during the past twelve months lead us to anticipate an outstanding flowering season ahead.

The Australasian Native Orchid Society (Qld) KABI Group Inc. will be hosting their inaugural Australasian Native Species and Hybrids Show at the Lion's Hall, Lawnton Showgrounds, Gympie Road, Lawnton, on the 6th and 7th of September, 2004. The Show will be open from 9am on Saturday and Sunday. This show will become an annual event and promises to be the major venue in Brisbane for exhibiting and viewing the best of native orchids in this area.

The latest seedlings and mature plants of species and hybrids of all native genera will available for purchase from a number of top vendors and refreshments will be available. A full range of orchid books and publications will also be on sale and of course, advice will be freely available from many keen enthusiasts.

Please mark the date in your calendars now.

All correspondence re Group to:
PO Box 424, Aspley 4034.
Contact phone number for Group
07 3359 5752.

-oOo-

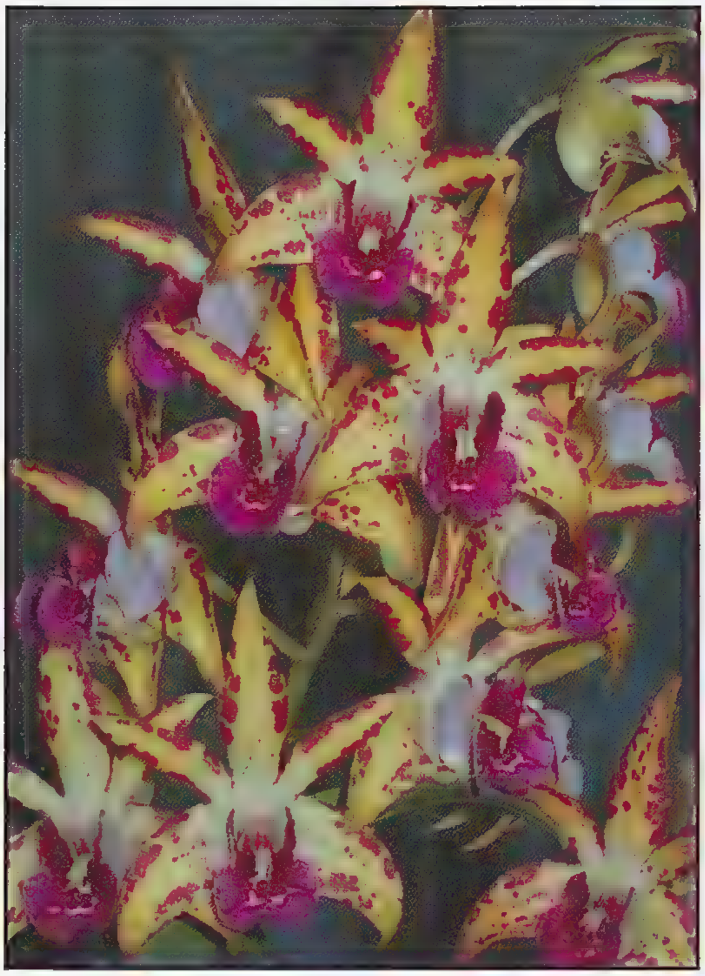
Tinonee Orchids Open Day and Show 2003

The Tinonee Orchids Open Day and Show on Sunday July 13th, the 10th anniversary of this event, was once again a great success. Indeed, a beaming Ray Clement declared 2003 "the best one yet", and the hoards of visitors to the nursery certainly supported that view. A picture of sartorial elegance in a stylish, mustard-coloured Tinonee Orchids outfit, and sporting a Wiggles-esque grin from ear to ear, Ray truly was the master of ceremonies as he moved among the crowd with an infectious, good-natured larrikinism, and legs that put Dame Edna's to shame.

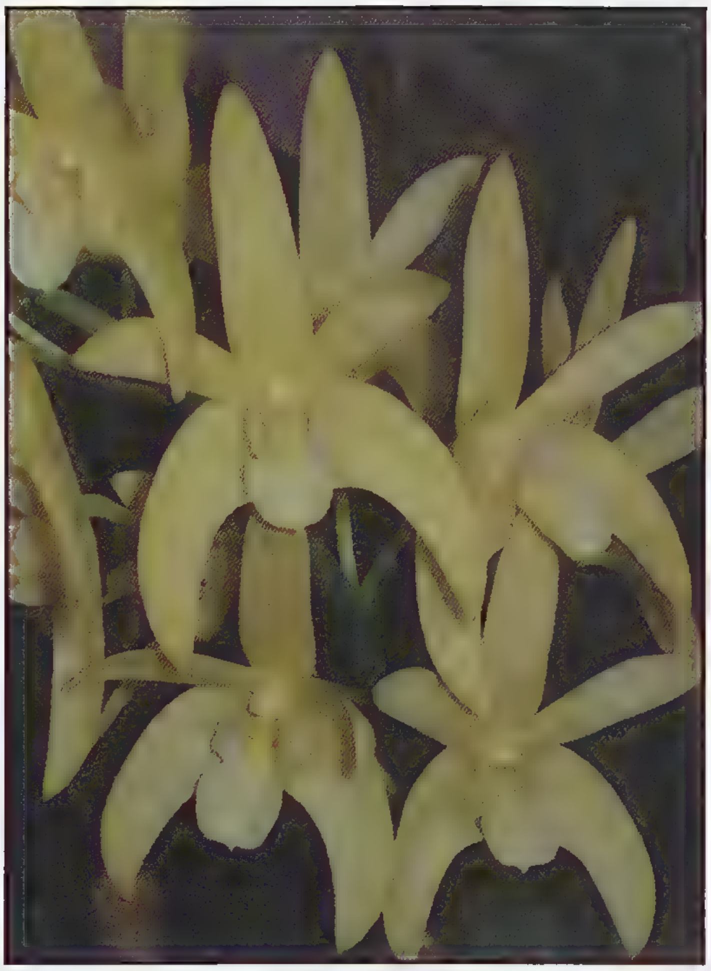
From the first cock-crow of the morning to the last glass of red in the evening, Ray was unstoppable, driven by enthusiasm and running on adrenaline, he seemed to be everywhere at once, and the superb warm winter's day he was able to arrange certainly showed he has friends at the very top. Ray really deserves his success for he works hard and he genuinely is one of the nice guys of the orchid world. Of course, the terminally obsessed decided to make a full weekend of it and arrived in Tinonee the day before the show, and spent the Saturday on a field trip led by John Riley and Ron Tunstall. About two dozen people were shown the local orchidaceous delights by this pair of experts, and they came back more than satisfied.

Travelling in convoy, they covered a considerable amount of territory around the Comboyne Plateau and altogether saw about twenty five species in the wild - an excellent tally for a one-day field trip.

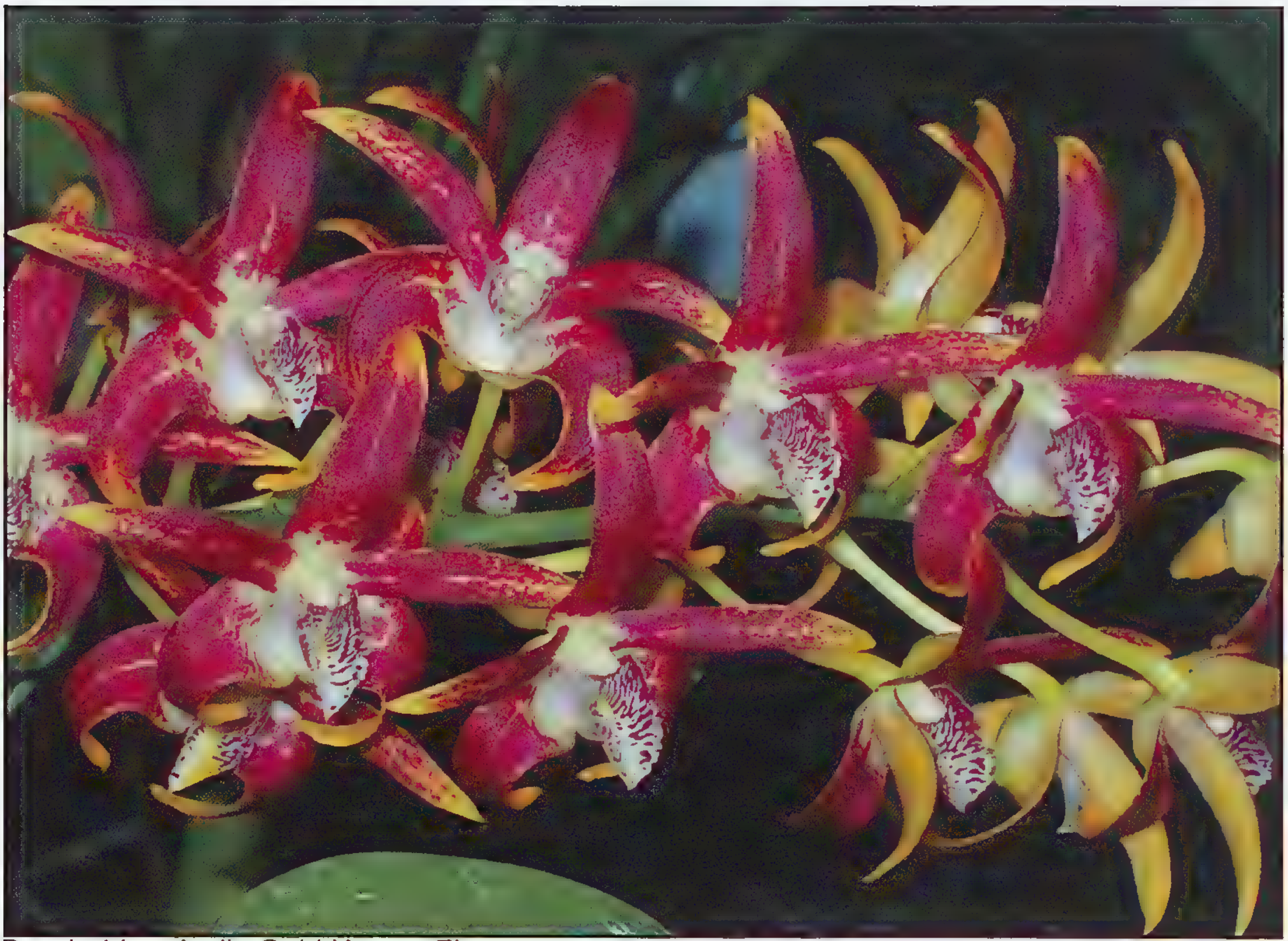
Some of the group convened again on Saturday evening at the Hindquarter Restaurant, a local Taree steakhouse, to mix in more civilised surroundings. Just about everyone, it seems, decided to order the seafood platter, the result of a tactical error on my part I must confess, after I had raved about how good it was last time we were there. When the management had to announce to Table 2 that due to unprecedented demand seafood was off the menu, we were left with no option but steak. In



Dendrobium Jazz 'RL'
Grower Don Cruickshanks



Dendrobium Lustrous x X*gracillimum*.
Grower Wayne Perrin



Dendrobium Avrils Gold 'Angus F'
Grower Henk van den Berg

Photos Michael Harrison

a steakhouse, no less! Still, a great time was had by all, even those who missed out on the prawns, and it wasn't until after 11.00pm that we headed back to Ray's to watch the rugby on TV and to anticipate the wonderful plants we would see on the morrow.

Next morning, by 8.00am it was controlled chaos, with boxes of plants being offloaded and exhibitors competing for bench space and filling out their paper work. Somehow, all the plants were eventually in place. The judges then got to work and without fear or favour they made their decisions.

One of the real highlights of the show was the wonderful massed display of *Dendrobium* Avril's Gold. There were a dozen and a half plants on the benches in various shades from lovely pure golden yellows through to those heavily marked with burnt orange. It was good to see them all together and to appreciate the variation in this hybrid. In high demand right around the country, *D.* Avril's Gold really is an orchid whose time has come, and it will be interesting to see how they perform over the next few years as they grow into even bigger, stronger plants.

Originally created by the late Ray Hill, *D.* Avril's Gold resulted from the crossing of his famous *D.* Aussie Child 'Avril' HCC-AD/AOC-NSW 1990 with *D. speciosum*. He made two versions of the hybrid, the first with *D. speciosum* var. *grandiflorum* (= *D. rex*) 'Golden Fluke', and then the following year he remade it using *D. speciosum* 'Windermere'.

They were slow to reach flowering size, but it was worth the wait. Early on, it seemed to be the 'Windermere' cross that was producing the best results, but over the past couple of years some of the 'Golden Fluke' crosses have been outstanding as well. In fact, the 'Golden Fluke' version of *D.* Avril's Gold seems to be producing the best clear yellows, whilst the 'Windermere' crosses are carrying the vibrant orange/red markings on the face of the flower, clearly a feature derived from the impressively coloured *D.* Aussie Child 'Avril'.

Champion Native Orchid Hybrid of the Show was Don Cruickshanks' *D.* Avril's Gold 'Wingham', a relatively young looking plant, carrying two erect, slightly arching inflorescences with 75 mm tall flowers in bright golden yellow. It was a striking exhibit, and even with the high quality of its rivals, Don's plant was a clear winner. This plant went on to be assessed by award judging panels from both ANOS and OSNSW, where it was granted an HCC from ANOS and an AM from OSNSW.

Don figured strongly in the judging results elsewhere as well, with two other first places. In particular, his *D.* Jazz 'RL' was a real standout, with brightly coloured, shapely flowers on upright racemes. Don also took out Best Specimen Plant of the Show with a large, beautifully presented plant of *D.* Aussie Starlight 'Dylan'. I was also very impressed with a lovely orchid benched by Wayne Perrin, *D.* Lustrous x X*gracillimum*. Clearly a vigorous grower, this plant carried large, open, soft green flowers on erect inflorescences and was greatly admired by many who saw it. Watch for this one in the future.

The man of the moment, Ray Clement, won Champion Australian Native Orchid Species with a fine, line-bred *D. tetragonum*, one of the intervarietal crosses between var. *giganteum* (= *D. capitisyork*) and var. *melaleucaphilum* (= *D. melaleucaphilum*). It was a fully mature plant, carrying masses of 80 mm tall flowers with sharp, clearly defined colour patterns. Even competing with some of the popular red-lipped forms of *D. tetragonum*, Ray's plant had the edge. A good display of terrestrial orchids was also present, largely thanks to Sid Burton, who is producing some impressive exhibits.

For those who made the trip to Tinonee, I don't have to tell you just what a good day it was, and I expect you will all be there again next year to continue the tradition. And for anyone else, do yourself a favour and plan to be there in 2004.

Michael Harrison
ANOS NSW Registrar of Judges.

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Paracaleana disjuncta (Orchidaceae), a Threatened New Species from Victoria and South Australia

a 210528

David L. Jones

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Abstract

Paracaleana disjuncta, known from three localities in South Australia and a single locality in Victoria, is described as new. Populations of the species total less than one hundred plants and it is considered to be endangered.

Key Words

Orchidaceae, *Paracaleana disjuncta*, endangered, new species, Australian flora, Victoria, South Australia.

Introduction

I have been studying the species of *Paracaleana* from the eastern states of Australia with a view to accounting for the variation exhibited by *P. minor* (R.Br.) Blaxell. The existence of an undescribed species with characters completely distinct from *P. minor* and shared by members of the genus from Western Australia was first brought to my attention by Noleen Ridley who, in 1988, showed me photographs obtained on Kangaroo Island. Subsequently I received photographs from Ken Cook of a plant he had photographed in the Grampians, Victoria. The relationship between the specimens in the photographs from the two sites was striking and it was not until 1995 that I was able to obtain fresh specimens sent by Denzel Murfet from Coxs Scrub Conservation Park in South Australia. These showed that the species was morphologically distinct from known taxa and it is here described as new.

Taxonomy

Paracaleana disjuncta D.L.Jones, sp. nov. affinis *P. nigritae* (J.Drumm. ex Lindl.) Blaxell, sed folio oblong-elliptico; labello latiore callis paucioribus majoribusque apicem versus; et labello lobo basali acuminato, differt.

Typus: South Australia; Coxs Scrub Conservation Park, 29 Oct. 1995, *D.E.Murfet 2292B & R.L.Taplin* (holo CANB, iso AD).

Illustrations: Plate 73, Bates & Webber (1990); page 120, Backhouse & Jeanes (1995); plate 301, Bishop (1996); page 99, Jeanes & Backhouse (2000) - as *Paracaleana* aff. *nigrita*.

Leaf obliquely erect, often withered at anthesis, single, basal, 10-20 mm long, 4-6 mm wide, oblong-elliptical, dull green above, purplish beneath, or wholly reddish; basal margins incurved. *Scape* 5-10 cm long, purplish or reddish, wiry, slightly wider distally than at the base. *Sterile bract* c. 5 mm long, tubular, closely sheathing or expanding away from the base of the pedicel. *Pedicel* 8-15 mm long, wiry. *Ovary* narrowly obovoid, 5-9 mm long, light green, asymmetrical. *Flower* solitary, 14-18 mm long, c. 7-8 mm wide, greenish red to reddish brown. *Dorsal sepal* downcurved, closely adherent to the column, obovate-spathulate when flattened, 7-10 mm long, c. 2 mm wide, distal margins inrolled, apex subobtuse. *Lateral sepals* obliquely decurved, linear-oblong when flattened, falcate, 8-10 mm long, c. 2 mm wide, margins inrolled or completely folded along the midline, apex subobtuse. *Petals* appressed against the column wings, the bases adherent to the column, narrowly linear-obovate, 7-10 mm long, c. 1 mm wide; margins flat, entire; apex subobtuse. *Labellum* supported by a broad flexible strap 6-7 mm long, c. 2.5 mm wide, greenish, with thickened margins; lamina obliquely erect when set, shaped like a duck's head and bill, 7-8.5 mm long, c. 3 mm wide towards the base, reddish-brown; proximal two-thirds of dorsal surface slightly irregular to roughened; distal third covered with large, black, shiny, wart-like calli; margins strongly recurved, the distal parts with similar calli; ventral surface pale-coloured, with three faint longitudinal lines; basal lobe deflexed, broadly ovate with a shortly acute apex. *Column* at an angle to the ovary, 8-9 mm long, c. 5 mm wide, deeply concave with large translucent reddish wings extending from base to apex. *Anther* c. 1.5 mm long, erostrate. *Pollinia* 4, clavate, c. 2.2 mm long, yellow. Stigma circular, c. 2 mm wide. *Capsules* not seen.

Distribution and Ecology

A rare species known only from four localities, three in South Australia, *viz* Coxs Scrub, near American River on Kangaroo Island and at Ashbourne (Bates & Webber 1990). In Victoria it is known from a single colony near Roses Gap in the Grampian Mountains in the west of the state. Habitat where the species grows is shrubby or heathy forest with the orchid occurring in relatively open sites. At the type locality it grows in white sand on a track and along a slashed verge amongst *Hypolaena fastigiata* R.Br. and *Austrostipa macalpinei* (Reader) S.W.L.Jacobs & J.Everett surrounded by dense heathy scrub (D.Murfet pers. comm.). On Kangaroo Island the plants were seen in an open area amongst shrubs in coastal scrub, growing in sandy laterite (N.Ridley pers. comm., D.L.Jones pers. obs.). In western Victoria the species grows in open areas in heathy woodland dominated by *Eucalyptus baxteri* (Benth.) Maiden & Blakely in well-drained sandy loam, apparently favouring moss pads (M.Duncan pers. comm.). Bates & Weber (1990) record the species as growing "in patches of damp bare sand around swamp margins, associated with stunted stringybark (*Eucalyptus baxteri*)". Altitude: 5-340 m. Flowering period: October to December.

Recognition

Distinguished from all other species of *Paracaleana* in eastern Australia by the oblong-elliptic leaf and the elongated labellum lamina. Its closest allies appear to lie in Western Australia with members of the *P. nigrita* (J.Drummond ex Lindl.) Blaxell complex (see below), which have been placed in subgenus *Tanychila* D.L.Jones & M.A.Clem. (Jones et al 2002). The new species can be distinguished readily from *P. nigrita* by its oblong-elliptical leaf (ovate-cordate in *P. nigrita*); wider labellum lamina with fewer, larger calli towards the apex and a pointed basal lobe on the labellum lamina (broadly rounded in *P. nigrita*).

Similar Species

The Western Australian species of *Paracaleana* are illustrated in Hoffman & Brown (1992) and detailed line drawings have been prepared by the author of most of these taxa. This western group, which is being studied by Stephen Hopper and Andrew Brown, consists of about six taxa, the majority of which are undescribed. Morphologically *P. disjuncta* is most similar to *Paracaleana* sp. Esperance (Hoffman & Brown 1992, page 209), but it can be distinguished from that taxon by its broader labellum lamina (c. 3 mm wide compared with 2.3-2.5 mm wide in the Esperance taxon) which in shape is distinctly broadly ovate-lanceolate with curved margins (narrowly ovate-lanceolate to linear-lanceolate with nearly parallel margins in the Esperance taxon); labellum apex densely covered in large calli (small widely separated calli in the Esperance taxon); and labellum basal lobe deflexed and broadly ovate with an acute apex (porrect and with a narrowly tapered blunt apex in the Esperance taxon). It also bears similarities with *P. triens* Hopper & A.P.Brown ms. but that taxon has a much larger labellum (10-13 mm x 5-5.5 mm).

Notes

The relationships between South Australian and Victorian populations of this species may require further study. It is noticeable that the South Australian specimens have more numerous and coarser glands on the labellum apex than flowers from Victoria. Whether these morphological differences can be considered to represent a significant genetic variation between the forementioned populations requires further investigation. The rarity and low numbers of this species limits the scope of studies which can be undertaken.

Flowers of *Paracaleana* species are pollinated by male thynnine wasps which attempt to fly away with the labellum for copulation purposes (Hoffman & Brown 1992, Bower 2001), although apomixis may also be involved in some taxa (Jones 1977, Bates 1983, Clements 1995). It is highly likely in such a specialised process involving pseudocopulation that an intimate relationship exists between each species of *Paracaleana* and a species of thynnine wasp, but this is yet to be confirmed.

Mike Duncan (pers comm.) observed on 25th November, 2002 that seven out of twenty three flowering plants in the Grampians population had set seed indicating a healthy level of visitation by the pollinating vector.

Conservation Status

In South Australia *Paracaleana disjuncta* consists of four small widely separated populations (probably extinct at Ashbourne) which probably total less than fifty plants and it is conserved in the Coxs Scrub Conservation Park. The Victorian population, which consists of c. thirty plants, is on private land (Mike Duncan pers. comm.). Backhouse & Jeanes (1995) assign this species in Victoria a conservation coding of 1ec suggesting the colony is included within the Grampians National Park but this is apparently not so. I suggest an overall conservation status category of 2EC according to the criteria of Briggs & Leigh (1996).

Etymology

Derived from the Latin *disjunctus*, widely separated, in reference to the disjunct populations of this species and their wide geographical separation from their allies in Western Australia.

Other Specimens/photographs examined

VIC: Roses Gap Road, Grampians, 1 Dec. 1992, *K.A. Cook* (photo!); *ibid*, 21 Nov. 2001, *Rouse 102 & McCann* (CANB); SA: Coxs Scrub Conservation Park, Oct. 1995, *G. Fishlock-Smith* (photo!); *ibid*, 27 Oct. 1995, *D.Murfet & R.Taplin* (photo!).

Acknowledgements

I thank Denzel Murfet and Dean Rouse for collecting specimens and Ken Cook, Noleen Ridley, Denzel Murfet, Rosemary Taplin and Guy Fishlock-Smith for photographs of the species. Marion Garratt and Karina Richards are thanked for valuable technical assistance and Laurie Adams for the Latin diagnosis. Michael Duncan, Dean Rouse, Jeff Jeanes, Mark Clements and Bob Bates provided useful discussions about the distribution and ecology of the species. Dean Rouse, Mark Clements, Karina Richards, Terena Lally and Anthony Whalen commented on the manuscript.

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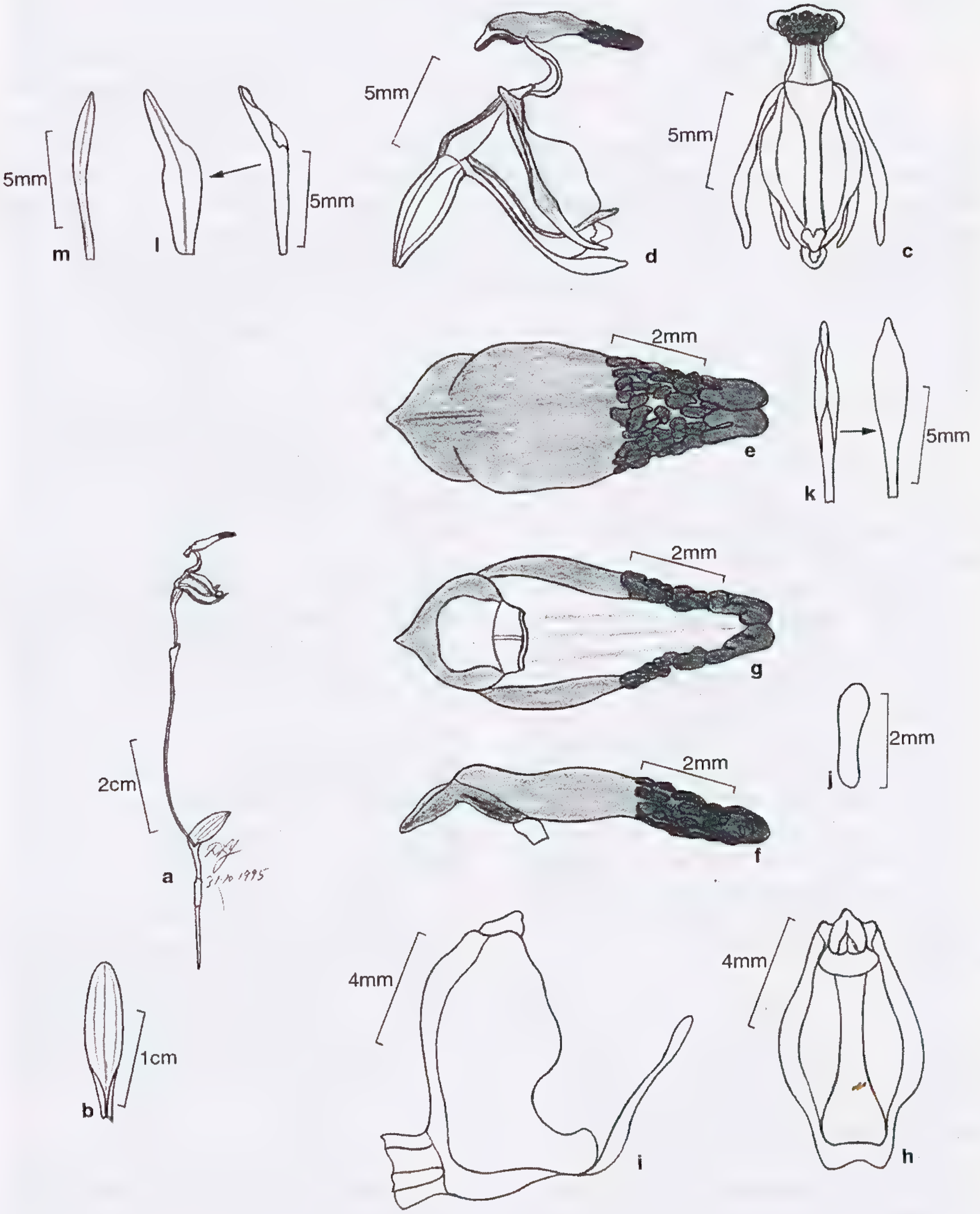


Caption: *Paracaleana disjuncta*, Coxs Scrub, SA, *D.E.Murfet 2292B & R.L.Taplin*, drawn from the type collection. a. flowering plant; b. leaf; c. flower from front; d. flower from side; e. labellum from above; f. labellum from side; g. labellum from below; h. column from front; i. column from side; j. pollinium; k. dorsal sepal, natural and flattened; l. lateral sepal, natural and flattened; m. petal.

A Review of *Oligochaetochilus despectans*,
(*Pterostylis despectans*)
The Short-Statures Greenhood

a 210527

Mike Wicks
mikewicks13@hotmail.com

"What do you do when your employer goes into receivership and you lose your job? In my case, it was look for another job, build a new shadehouse and, what else? Then I heard about a meeting where the conservation of the endangered Lowly Greenhood *Oligochaetochilus despectans* would be discussed. The meeting, organised by ANOS Victoria members Adrian and Myra Morton, and Jenny Alexander of the then Victorian Department of Natural Resources and Environment (NRE), included a few ANOS Victoria members, and I was able to cadge an invitation.

Early in June 2001 we met Adrian, Myra, and Jenny at Talbot, a small country town some 50 km north of Ballarat in western Victoria. We were led to six nearby sites to get a feel for the variations in the habitat the orchid grows in, and to discuss the threats the orchid faces. An estimated twelve hundred rosettes were seen on the day.

Over lunch we discussed the threats to the orchids then proceeded to the Type Location. The vegetation seemed different to that of the previous sites, and no rosettes were found. We pondered whether the site had become too overgrown over the eighteen years since the Type Collection was made, or whether fertilisers or herbicides had drifted across from the adjacent paddock and wiped out the orchids.

Still no job, so late in June I travelled to South Australia to look at their *O. despectans* sites. Joining Thelma and Phil Bridle and other members of NOSSA and Doug Bickerton, a Threatened Orchid Project officer with the South Australian Department for Environment and Heritage (DEH), we visited a farm near Brinkworth where the owner had discovered *O. despectans* on a bush block the previous year.

On arrival we found a fresh, undamaged, plant lying on the ground next to a peculiarly-shaped scrape. This was a rare opportunity to photograph the entire plant including the old and half-formed new tuber, before the orchid was replanted. In total we counted nearly five hundred rosettes, all occurring in an area the size of two house blocks.

At the better-known Mt Bryan location and again on private land, the NOSSA group counted about thirteen hundred plants on two properties and a roadside. With friendly rivalry between Victorian and South Australian volunteer conservationists, the contest of which state has more *O. despectans* plants was on.

Description

So what does this orchid look like? Between mid-April and June, a rosette finds its way through the hard-baked surface and spreads its three to seventeen pointy leaves hard against the ground. Rosettes measured at three Victorian sites in 2001 were typically between 20-35 mm in diameter, with extremes of 8-56 mm.

About the end of August a flower raceme starts to emerge from the centre of the rosette, and by late September the leaves are drying off. In South Australia some flowers have opened by the start of November, while Victorian flowers start opening five weeks later. Flowers in good condition have been seen in early February in Victoria, but these are rare.

The fleshy, water-laden stem up to 10 cm tall can carry up to six flowers. While four flowers is the most I've seen on one stem, Doug Bickerton says six flowers to a stem is not uncommon at Mt Bryan, and he has seen one plant there with seven flowers (two spent, one open, and four buds).

The flowers, with a galea about 15 mm long, are green and orange or brown in colour and have colourless translucent panels, particularly in the galea. The pedicel between the flower and the stem is long and often S-shaped. Both dorsal and lateral sepals have filiform points which are longer than the length of the galea, the lateral sepals being very hairy.

Khaki to dark brown in colour, the obovate labellum is thin and has two prominent swellings near the base, each surmounted by a long bristle. A central ridge starts just below these swellings and goes to the labellum tip, which juts forwards. The margin is fringed with short hairs, those at the labellum tip sometimes being reduced to a short fuzz.

In South Australia a green seedpod has been seen late in November, but pods are more typically seen between mid-December through January, and to the end of February in Victoria. The pollinator is unknown but is suspected to be a tiny fly, similar to other Pterostylis alliance orchids. However, since the long filiform ends of the lateral sepals usually touch the ground it has been suggested that perhaps some small non-flying insect may be the pollinator.

After fertilisation, the pedicel becomes upright before the ovary bursts, aiding wind-dispersal of the seed. The dried flower raceme often persists until the next season's rosette has emerged, and I have seen one rosette with the previous two years dry flower racemes still standing.

DNA testing has shown that the Victorian and South Australian plants are definitely the same species. This agrees with my own observations that the plants from both states look identical.

Two undescribed species, both referred to as *Pterostylis* (now *Oligochaetochilus*) *aff. despectans*, are known. These are from Eyre Peninsula in South Australia (refer Bates and Weber, 1990), and from east of Perth in Western Australia (refer Hoffman and Brown, 1998). Both hold their flowers off the ground, the Western Australian species having a flower raceme between 20-35 cm high. David Jones (pers. comm.) states that the South Australian species is closely related to true *O. despectans*, while the Western Australian species is not related at all.

Distribution

In mid-2001, *Oligochaetochilus despectans* was only known to occur in Victoria at a few locations within 5 km of Talbot, and at one location on private property at Maryborough. The list of other plant species occurring at the Type Location (1983) was used to search the Victorian Governments Flora database to identify other areas with the same or similar habitat. The ANOS Victoria conservation group has used this information to search several areas from Muckleford, near Castlemaine, to the Stawell area. A few more sites around Talbot have been found, but finds near Avoca 15 km to the north-west of Talbot represent the only significant extension of its range in that state.

In South Australia, *O. despectans* was known from a single plant at Mt Bryan prior to 1970. It was not seen again until 1993 when a few plants appeared near the site of the original plant. Plants have been seen at this site each year since then. Searches since 2000 by NOSSA and Doug Bickerton have identified another population spread across three adjacent properties nearby, two of which have more plants than currently known at the original Mt Bryan site.

Late in 2001 a landholder near Brinkworth, some 60 km west of Mt Bryan, realised that there was an unusual greenhood in remnant native bush on her property. Identifying the species as *O. despectans*, she contacted friends in NOSSA, who passed the information on to Doug Bickerton. Almost five hundred plants have been found at this site.

Photos of three Victorian sites can be found in Volume 14, Issue 1 of *The Orchadian*, being the upper photo on page nine, and both photos on the back cover. Photos of one Mt. Bryan site are in this issue.

There are currently about twenty six hundred plants known in Victoria and twenty three hundred plants in South Australia, clustered in three small areas, and I believe further searching may locate as many as another two thousand plants within these areas. This is probably the total extent of the species unless there are significant undiscovered colonies well away from these three areas.

Habitat

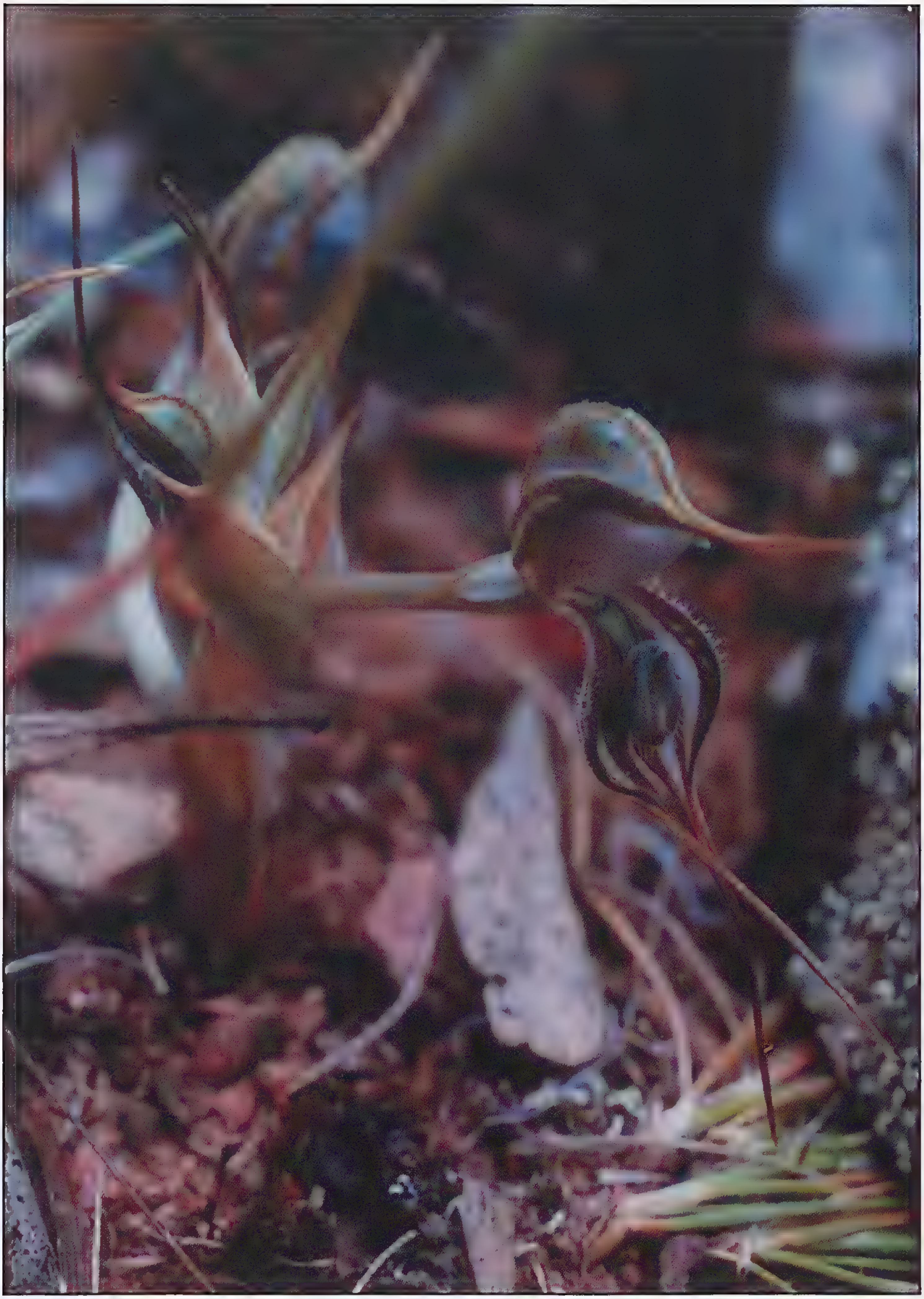
In Victoria *Oligochaetochilis despectans* occurs on nearly-level ground in Grey Box, Yellow Box, Yellow Gum woodland. The canopy cover varies between 25% and 100%. Some sites have a grass and herb understorey whilst the others have a heathy/scrubby understorey. The grassy understorey is due to the surface being heavily scoured over the last one hundred and fifty years by gold miners and, more recently, weekend prospectors. The soil is a hard red loam containing a lot of quartz, the largest pieces seen being fist-sized. The soil bakes rock-hard in summer, which may help prevent dehydration of the tubers. Several of the sites have moss to 10 mm deep, but this quickly dries out in warm weather.

In South Australia, the Mt Bryan sites are on gently sloping land in Peppermint Box woodland with an understorey dominated by native grasses and herbs. The canopy cover varies between 20% and 100%, but the rosettes with little canopy cover are mostly on the south-eastern side of trees and gain shelter from the hot afternoon sun. The soil is a hard, stony, clay loam. Two sites have very shallow soil and frequent outcrops of the underlying granite, while the other site has little rock outcropping but is still more rock than loam. Moss is present but rarely more than 5 mm deep. These sites have been used for low-intensity sheep grazing for many years. A nearby patch of uncleared land has a grassy understorey below the Peppermint Box, so the sites where *O. despectans* occurs may have also originally had a heathy understorey.

The Brinkworth site is a little different. While still on gently sloping land in Peppermint Box woodland, the understorey close to the orchids is largely young (2-3 m tall) Golden Wattles and native grasses. A little further up the slope there is a profusion of other understorey species. This may be explained by examination of the underlying rock. The upper part of the slope is derived from sandstone while the part where the orchids are is derived from phyllitic shale. There are gaps of up to 50% in the canopy near the orchids, but further shade is provided by the Golden Wattles. No cattle or sheep have grazed the property for over forty five years.

Seven Victorian sites have each had several associated species vegetation surveys carried out over the last two years. Apart from the aforementioned trees, the most common associated species are the terrestrial orchids *Caladenia fuscata*, *Glossodia major*, and *Microtis unifolia*, the lilies Early Nancy, Twining Fringe-lily, and Nodding Chocolate-lily, plus Native Wheat-grass, Cranberry Heath, Sticky Everlasting, Magenta Stork's-bill, Common Raspwort, a native Oxalis, and Gold-dust, Golden, and Hedge Wattles.

Fewer associated species surveys have been done at the South Australian sites, and mainly in November and December. Species recorded in the surveys include Wingless



Oligochaetochilus despectans Mt Bryan November, 2001. Photo Mike Wicks

Bluebush, Nodding Saltbush, and Pussy-tails, and indicate the South Australian sites are drier than the Victorian sites. After adjustment for terrain-induced variation, the long-term rainfall figures for the Bureau of Meteorology locations nearest the Victorian and South Australian orchid sites indicate similar monthly and annual rainfalls. This suggests that the soil depth and lie of the land may not be significant factors in where *O. despectans* grows.

Threats

In South Australia, all known colonies of *O. despectans* occur on private property. One colony has been covered by a Heritage Agreement for the last twenty five years, with no grazing for over forty years. Another site had light grazing early each autumn, and a third was in a lambing paddock mostly used in late winter and spring. Two years ago the owner of one property fenced off two hectares to allow the site to be monitored for five years without the impact of grazing.

Talbot is in the goldfields region of Victoria. Amateur gold prospectors roam over the Victorian State Forest sites, trampling herbs, breaking shrubs, and disturbing the soil every time their metal detectors go 'click'. Several spade-sized holes have been found at *O. despectans* sites, and gold-prospecting clubs have been seen camping on a pegged monitoring site twice in the last two years.

Despite this, the greatest threat is from the White-winged Chough. These ground-foraging birds live in family groups of up to twenty. The team works over the forest floor and consume anything that looks remotely edible. They seem to possess an orchid radar, digging a neat hole next to the rosette (whether green or dried) down to the tuber, then discarding the rosette and underground portion of the stem. They visited one monitoring site a week after it was set up and took eleven of the fifty plants being monitored. Another monitoring site looked like a colander after they'd been through, with holes no more than 10 cm apart covering an area of at least 6 x 10 metres. So far they have only damaged Victorian sites, but Choughs are known to frequent the Mt. Bryan area.

You want more threats? How about exotic grasses and herbs. Each State has its "favourite" species, which include Wild Oats, Large Quaking-grass, and other pasture grasses, clovers, spear thistles, and Patterson's Curse. Rabbits are a problem in Victoria, but plants in both States lose flowers to kangaroos or wallabies, caterpillars, and slugs.

Another natural threat is Australia's highly variable climate. 2002 saw most flower stems abort in Victoria, the result of five years of drought. The South Australian sites were also affected, with one in every three aborting at the Mt. Bryan sites.

Finally, few flowers have set seed naturally. Work done by Andrew Batty (2002) indicates that ungerminated terrestrial orchid seed has lost its viability after a year in the soil. Hungry Choughs, low rates of seed set, and another prolonged drought could easily wreak enormous damage to the species.

Oh yes! Off-road vehicles and firewood collection are permitted in the Victorian State Forests. These churn up the soil as well as crushing leaves and flower stems.

Conservation Actions

So what has been done to reduce the impact of these many threats? Some flowering plants in Victoria have been caged for the last two years to protect them from Choughs. Caging on a larger scale is time-consuming, brings the plants to the notice of passers by, and requires frequent maintenance due to wallabies hopping or lying on them, prospectors stamping on them, and having to remove fallen forest debris from them. The Victorian Department of Sustainability and Environment, part of the previous Department of Natural

Resources and Environment, has recently erected rabbit-proof fencing at three sites. The fences won't keep the Choughs out, but the shape and small size of the fenced areas has previously been found to be effective at keeping wallabies out.

Hand-pollination has been carried out on several plants at one Victorian site, with most pollinated flowers producing seedpods. No weeding has been attempted at any site. It is very labour-intensive, needs great care in where the weeder stands, and any soil disturbance may simply make another site for weed invasion.

Most of the hands-on conservation work carried out in Victoria has been done by ANOS Vic volunteers. Through Botanic Guardians grants, the Victorian Government has funded the purchase of caging materials, tape measures and pegs for monitoring, and other expenses. Adrian Morton regularly discusses our progress with Jenny Alexander, and her replacements Lyndall Rowley and Deanna Marshall. Additionally, annual reports have been produced by Andrew Dilley, the ANOS Vic Conservation Co-ordinator. These have been sent to the Botanic Guardians administrators and to Jenny, Lyndall, and Deanna.

In South Australia a fence was erected around the majority of one Mt Bryan population to reduce grazing pressure. Negotiations continue to achieve the placement of a Heritage Agreement and fencing on the relevant portion of another property. Monitoring and searches have been carried out by NOSSA volunteers working with the Threatened Orchids project officer for the region. Caging was tried for a few plants early in the 1990's but was abandoned as orchids did not necessarily survive in the cages. However, if the Choughs continue to be nosy then caging may become obligatory.

I understand there has been little official communication between the two states conservation departments about this orchid, perhaps due to perceived differences in approach or differing threats. This has been replaced with discussions, emails, exchange of monitoring results, etc, between the volunteers in the two states, and between Doug Bickerton and Adrian Morton and myself.

Early this year Doug Bickerton changed jobs and a replacement has now been appointed. We hope to search a new property in the Mt. Bryan area in July, and will continue to monitor plants at the known sites.

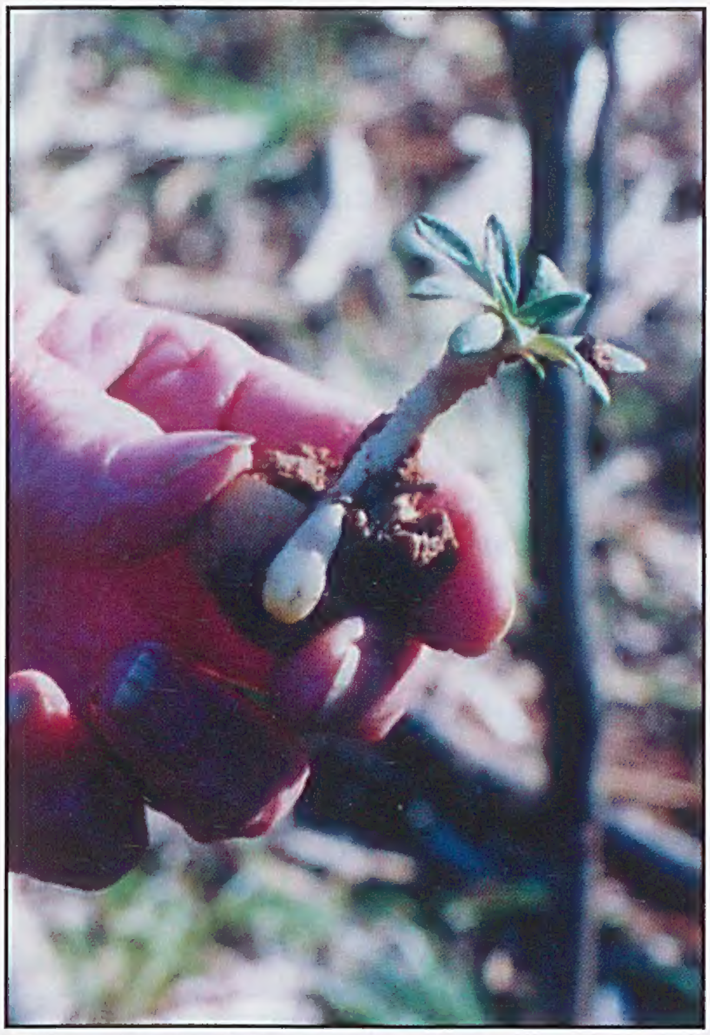
In Victoria, Parks Victoria intend taking a more hands-on role in the management of *O. despectans*. We're not yet sure what this means, but Parks Victoria are a different government agency to the Department of Natural Resources and Environment and its successors. In the interim, the recent associated species surveys for the Victorian sites have been used for another search of the Victorian Flora database. This has identified more sites for us to search for *O. despectans*. And we will continue the monitoring and caging work we have been doing for the last two years.

I thank Doug Bickerton, Thelma Bridle, Adrian Morton, and Dick and Marion Thomson for commenting on drafts of this article, and Russell Mawson for providing some of the photos. My thanks also to David Jones for information about the two species of *O. aff. despectans*. Thanks also to the NOSSA and ANOS Victoria volunteers for their involvement in conserving this species in their respective states, especially Adrian and Myra Morton for their efforts in Victoria over several years. And special thanks to the South Australian farmers who have allowed access to their properties and contributed in other ways to the conservation of this short-statured, but never "lowly", greenhood.

Habitat at Talbot, September 2001.

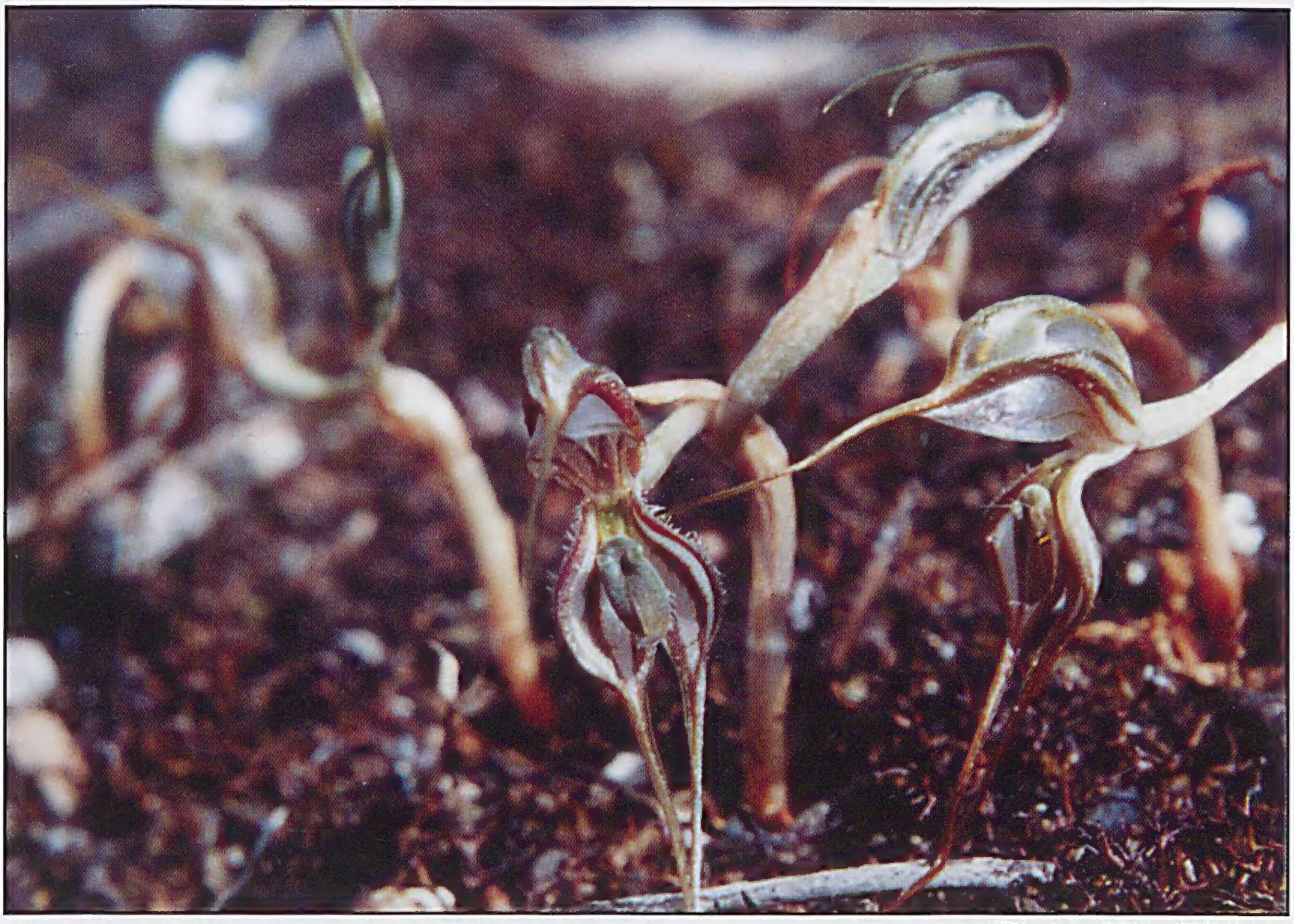
Habitat at Brinkworth, June 2001.

Habitat at Mt Bryan, July 2001.



Oligochaetochilus despectans plant.

Cough leftovers. This photo Russell Mawon



Oligochaetochilus despectans, Talbot 2001.

Photos Mike Wicks

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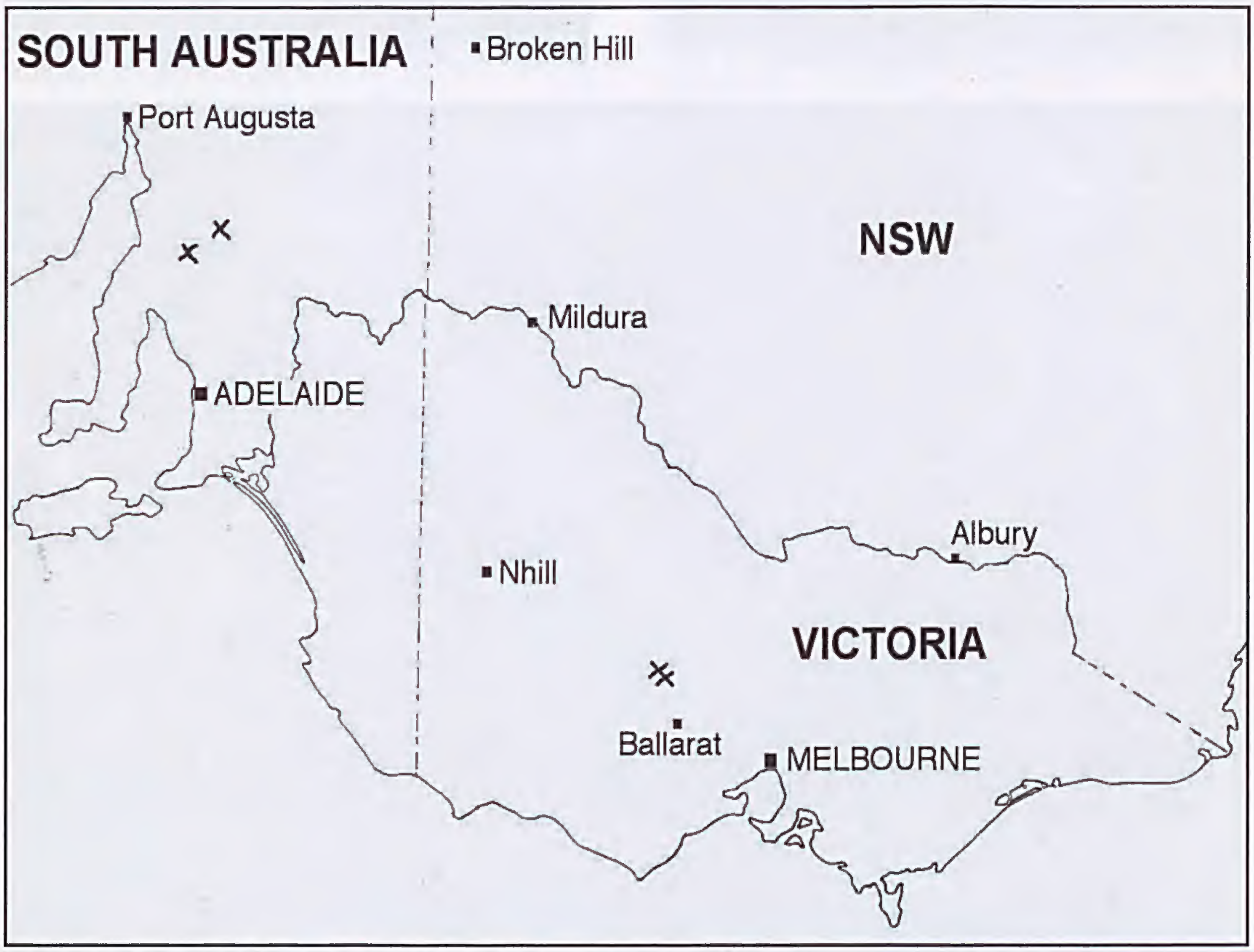

Map showing the two sites in Victoria and the two in South Australia.
(Marked with an X)

DIRECTORY OF A.N.O.S. GROUPS (& Associated Societies)

NEW SOUTH WALES

- **ANOS Central Coast**, P.O. Box 3010, Erina 2250. ☎(02) 4343-1809. Meetings 8pm, 2nd Wed. each month. Temple Kiely Visitors Centre, Department of Agriculture Station, Research Rd., Narara.
- **ANOS Far North Coast**, P.O. Box 949, Ballina 2478. ☎(02) 6686-6303. Meetings 7.30pm, 3rd Fri. each month. C.W.A. Room, River Street, Ballina.
- **ANOS Illawarra**, 2 Wiford St, Corrimal, 2518. ☎(02) 4284-8308. Meetings 7pm, 2nd Tue. each month. Legacy House, 96 Market St., Wollongong.
- **ANOS Macarthur & District**, 40 Carrington Circuit, Campbelltown 2560. ☎(02) 4626-1825. Meetings 8pm, 3rd Wed. each month. Narellan Community Hall, Queen St., Narellan.
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- **ANOS Newcastle**, P.O. Box 273, Kotara Fair 2289. ☎(02) 4975-3729. Meetings 7.30pm, 4th Wed. each month. Warners Bay Lions Club Hall, Sweet St., Warners Bay.
- **ANOS Port Hacking**, P.O. Box 359, Gymea 2227. ☎(02) 9524-9996. Meetings 8pm, 4th Wed. each month. Presbyterian Church Hall, 391/393 Port Hacking Rd. Sth., Caringbah.
- **ANOS Sydney**, 22 Rabaul Ave, Whalan. ☎(02) 9624-1768. Meetings 8pm, 3rd Fri. each month. Senior Citizens Hall, Baulkham Hills Community Centre (off Conie Ave.) Baulkham Hills.
- **ANOS Warringah**, P.O. Box 421, Forestville 2087. ☎(02) 9416-4306. Meetings 8pm, 3rd Tue. each month. Community Hall, Starkey St., Forestville.

QUEENSLAND

- **ANOS Kabi**, 2126 Gympie Rd, Bald Hills 4034. ☎ (07) 3359-5752 Meetings 7.30pm, 2nd Tue. each month (except Jan.). Bald Hills Memorial Hall, Gympie Rd., Bald Hills.
- **ANOS Gold Coast**, PO Box 330, Ashmore City, 4214. ☎ (07) 5535-1255. Meetings 1.30pm last Sunday each month, held at The Community Centre, Lawson St Southport.
- **ANOS Mackay & Dist.**, 98 Belford Rd, Andergrove. ☎(07) 4955-1631. Meetings 7.30pm, 2nd Thursday of each month at the Andergrove Community Centre, Celeber Drive, Mackay.
- **ANOS Townsville**, P.O. Box 1147, Aitkenvale 4814. ☎(07) 4778-4311. Meetings 8pm, 1st Tue. each month. Townsville Orchid Society Hall, Pioneer Park (opp. Willows Shopping Centre), Thuringowa..
- **Native Orchid Society of Toowoomba**, P.O. Box 2141,Toowoomba 4350. Meetings 7.30pm, 1st Fri. each month. Red Cross Hall, Hall Lane (off Neil St.) Toowoomba.

VICTORIA

- **ANOS Geelong**, Unit2, 2 Elizabeth St., Belmont 3216. ☎(03) 5243-4286. Meetings 8pm, 2nd Wed. each month. Uniting Church Hall, Moorabool St., South Geelong.
- **ANOS Victoria**, P.O. Box 2685, Cheltenham 3192. ☎(03) 9954-7692. Meetings 8pm, 1st Fri. each month. Demonstration Hall, Burnley Horticultural College, Swan St., Burnley.

SOUTH AUSTRALIA

- **Native Orchid Society of South Australia**, P.O. Box 565, Unley 5061. ☎(08) 8356-7356. Meetings 8pm, 4th Tue. each month. St. Matthews Hall, 67 Bridge St., Kensington.

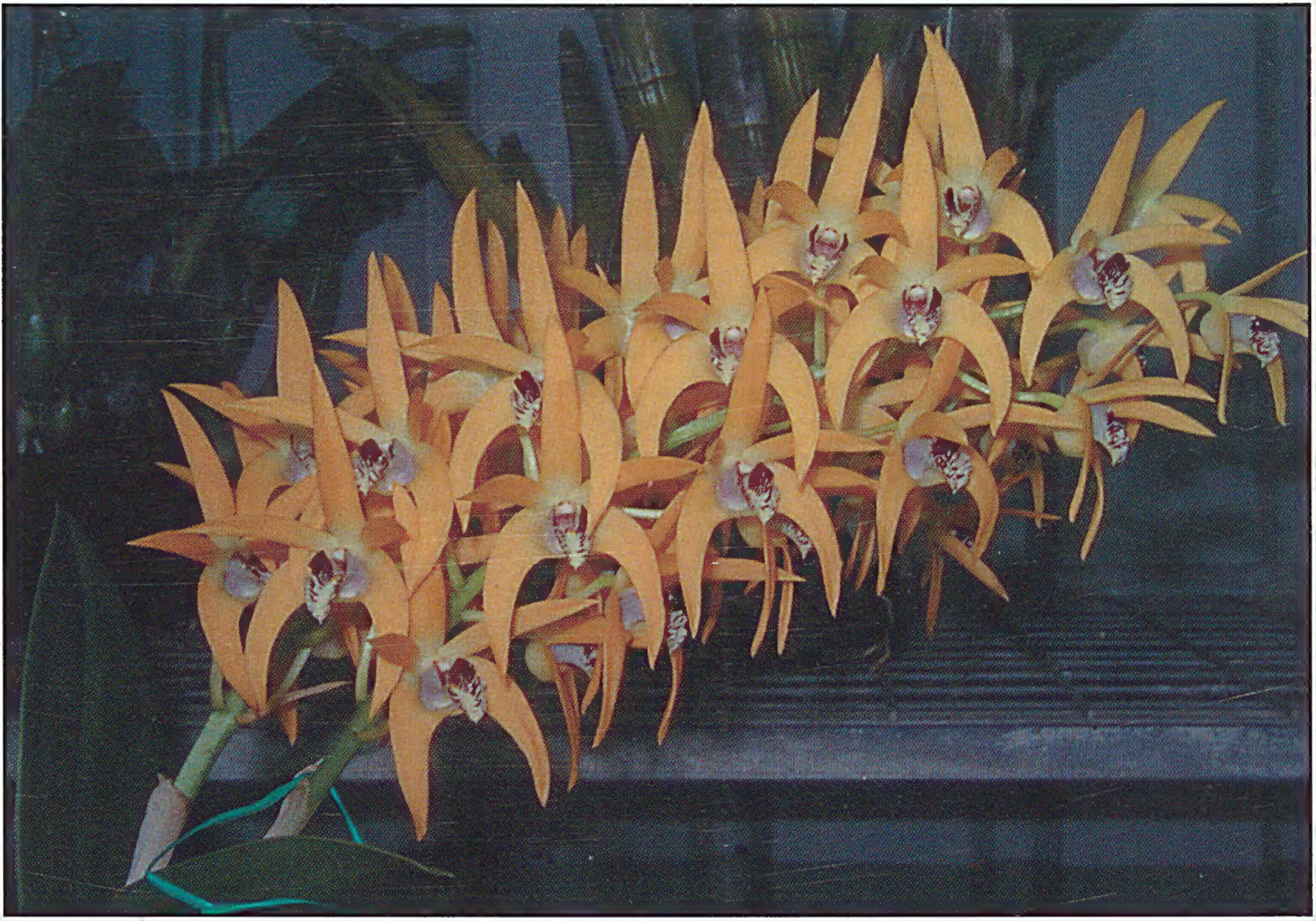
WESTERN AUSTRALIA

- **ANOS Western Australia**, 95A Ewen St., Scarborough 6019. ☎(08) 9341-6709. Meetings 8pm, 2nd Mon. each month. Wilson Community Hall, Braibrise Rd., Wilson.

NEW ZEALAND

- **ANOS New Zealand**, Margaret Phair, 21 Paparoa Rd, Howick, Auckland, New Zealand.
- **ANOG**, 51A Glenharrow Ave., Christchurch, New Zealand. ☎(03) 342-7474.
- **New Zealand Native Orchid Group**, 22 Orchard St., Wadestown, Wellington, New Zealand.

Tinonee Open Day



Top photo: *Dendrobium* Avrils Gold 'Wingham'. AM/OSNSW, HCC/ANOS 2003.
Champion Hybrid of the Show.
Bottom photo: Don Cruikshanks holding *Dendrobium* Aussie Starlight 'Dylan' CC/OSNSW
Champion Specimen of the Show.